

**ANNEX SEVEN / TRANSPORT & COMMUNICATIONS / TELECOMMUNICATIONS**

**Sub - sector : East Digital Microwave Link**

**Site - Name : SINAK**

<b>Code</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Complementary Items</b>
07-03-01100	SDH Microwave Radio Equipment	Lot	1	
07-03-01101	-STM-1, 6/8 GHZ (3+1), Radio Terminal With Frequency & Space Diversity all complete.	Set	2	
07-03-01102	-128 QAM Modems Modules.	Set	8	
07-03-01103	-Protection Switch.	Set	2	
07-03-01104	-Engineering order wire channel.	Set	2	
07-03-01105	-2Mb/s auxiliary traffic.	Set	2	
07-03-01106	-Interface to central Network management.	Set	2	
07-03-01107	-Peripherals ( Lap Top PC , etc..... )	Set	2	
07-03-01108	-Rack with 48V. d/c unit (duplicated ).	Set	<b>5</b>	
07-03-01109	-Installation & Maintenance tools & materials.	Set	3	
07-03-01110	-Spare parts & spare units.	Set	3	
07-03-01111	-Documentation.	Set	1	
07-03-01119	Microwave Antennas	Lot	1	
07-03-01120	-Parabolic Dish ( 1.8 - 3.7 )m. diameter .	Set	3	
07-03-01121	-Antenna Radiation Element with ( 1 / 2 )Ports.	Set	3	
07-03-01122	-Connector Flanges.	Set	3	
07-03-01123	-Tower Attachment.	Set	3	
07-03-01124	-Installation & Maintenance tools & materials.	Set	3	
<b>07-03-01125</b>	<b>Radome</b>	<b>Set</b>	<b>3</b>	
07-03-01129	Microwave Feeders	Lot	1	
07-03-01130	-Elliptical waveguide for 8/6 GHZ band .	Meter	300	
07-03-01131	-Medium capacity dehydrator.	Unit	1	
07-03-01132	-Pressure Window.	Unit	6	
07-03-01133	-Fixture clamps.		<b>300</b>	
07-03-01134	-Earthing Kits.	Set	<b>10</b>	
07-03-01135	-Installation materials & tools.	Set	6	
07-03-01136	-Documentation.	Set	1	
07-03-01139	DC Power Plant	Lot	1	
07-03-01140	-Modular switched rectifier system 48V / 30Ampere module (10+2) configuration.	Set	1	
07-03-01141	-48V,1000Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-03-01142	-Cabinet.	Set	4	
07-03-01143	-Installation materials , cables, tools.	Set	1	
07-03-01144	- Documentation.	Set	1	
07-03-01149	Air Conditioners	Lot	1	
07-03-01150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-03-01151	-Piping & installation materials & fixtures.	Set	2	
07-03-01152	-Spare parts.	Set	2	
07-03-01153	-Documentation.	Set	2	
07-03-01159	Diesel Engine Generator	Lot	1	
07-03-01160	-Capacity 50 KVA, Dual Set.	Set	1	

07-03-01161	-Daily Fuel Tank.	Set	1	
07-03-01162	-Fan.	Set	1	
07-03-01163	-Piping.	Set	1	
07-03-01164	-Control cubicle & Alarms.	Set	1	
07-03-01165	-Installation Materials & Tools.	Set	1	
07-03-01166	-Spare parts & PCB's.	Set	1	
07-03-01167	-Documentation.	Set	1	
07-03-01169	SDH Multiplex Equipment	Lot	1	
07-03-01170	-STM-4 Multiplexer Subrack with redundant common units	Set	4	
07-03-01171	-STM-1 Multiplex Subrack with redundant common units	Set	3	
07-03-01172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	10	
07-03-01173	-Access & Connection Modules.	Set	6	
07-03-01174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	6	
07-03-01175	-Full Matrix ( duplicated).	Unit	6	
07-03-01176	-Auxiliary /Engineering order wire.	Set	2	
07-03-01177	-Telephone Handset.	Lot	2	
07-03-01178	-Installation Materials & Tools.	Lot	2	
07-03-01179	-Racks with power supply unit (duplicated)and cable head.	Set	6	
07-03-01180	-Digital Distribution Frames.	Set	6	
07-03-01181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	16	
07-03-01182	-Equipment craft terminal for programmed control and display with operation soft ware .	Unit	2	
07-03-01183	-Spare parts & spare units.	Lot	6	
07-03-01184	-Installation materials & tools.	Lot	2	
07-03-01185	-Documentation.	Set	2	
<b>07-03-01186</b>	<b>'- Tributary Units (1x34Mb/s, 34M SW)</b>		<b>6</b>	<b>Set</b>
<b>07-03-01187-1</b>	<b>4W 1E&amp;M Channel units for 2M Primary Multiplex.</b>		<b>30</b>	<b>Ea</b>
<b>07-03-01187-2</b>	<b>-2W FXO Channel units for 2M Primary Multiplex.</b>		<b>60</b>	<b>Ea</b>
<b>07-03-01187-3</b>	<b>- 2W FXS Channel units for 2M Primary Multiplex.</b>		<b>0</b>	<b>Ea</b>
07-03-01189	Network Management Equipment	Lot	1	
07-03-01190	-Central Network Management System platform(Hardware)	Lot	1	
07-03-01191		Set	1	
07-03-01192	-Central Network Management System software packages.	Lot	1	
07-03-01193	-Local Network Management Equipment ( craft terminals).	Lot	1	
07-03-01194	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-03-01195	-Installation Materials & Tools.	Set	1	
	-Documentation..			
07-03-01119	Test Instruments	Lot	1	
07-03-01200	-Digital Multimeter.	Set	2	
07-03-01201	-Frequency Counter .	Set	1	
07-03-01202	-Power Meter .	Set	1	
07-03-01203	-PCM Multiplex Tester .	Set	1	

07-03-01204	-RF Sweep Generator .	Set	0	
07-03-01205	-VSWR Test Set.	Set	0	
07-03-01206	-Scalar Network Analyzer .	Set	0	
07-03-01207	-RF Spectrum Analyzer.	Set	0	
07-03-01208	-SDH Analyzer for STM-1.	Set	1	
07-03-01209	-TX / RX MW Link Analyzer .	Set	0	
07-03-01210	-PDH Analyzer ( 2-140Mb/s ).	Set	1	
07-03-01211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-03-01212	-Vedio Test Set.	Set	0	
07-03-01213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.	Set	0	
07-03-01214	-Cables & Adapters.	Set	1	
07-03-01215	-Waveguide / Coax. Adapters.	Set	0	
07-03-01216	-Documentation.	Set	1	
07-03-01219	Specific Tools	Lot	1	
07-03-01220	-20 Ton Lorry with crane & winch.	Unit	0	
07-03-01221	-Specific Maintenance Tools	Lot	1	
07-03-01222	-Station Tools	Lot	1	
07-03-01223	-Special Tools for waveguide.	Lot	1	
07-03-01224	-Installation Tools.	Lot	1	
07-03-01229	Services	Lot	1	
07-03-01230	-Factory Training Abroad.	Trainee	5	
07-03-00231	-Training In Iraq.	Trainee	8	
07-03-01232	-Supervision Services (Supplier Expert).	Expert	2	
<b>07-03-01249</b>	<b>Vedio/Sound Equipment</b>	<b>Lot</b>	<b>1</b>	
<b>07-03-01256</b>	<b>2 Decoders(2x Video 34Mb/s plus 4 sound channels/each)and 2 Codecs sound channels</b>	<b>Lot</b>	<b>1</b>	
<b>07-03-01259</b>	<b>-Documentation (Equipemnt Description(2sets),Operation &amp;Maintenance Description(1sets)</b>	<b>Lot</b>	<b>0</b>	

**ANNEX SEVEN / TRANSPORT & COMMUNICATIONS / TELECOMMUNICATIONS**

**Sub - sector :East Digital Microwave Link**

**Site - Name : KIRKUK EXCH.**

<b>Code</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Complementary Items</b>
07-03-02100	SDH Microwave Radio Equipment	Lot	1	
07-03-02101	-STM-1,13/11GHZ, (3+1) Radio Terminal With Frequency & Space Diversity all complete.	Set	1	
07-03-02102	-128 QAM Modems Modules.	Set	4	
07-03-02103	-Protection Switch.	Set	1	
07-03-02104	-Engineering order wire channel.	Set	1	
07-03-02105	-2Mb/s auxiliary traffic.	Set	1	
07-03-02106	-Interface to central Network management.	Set	1	
07-03-02107	-Peripherals ( Lap Top PC , etc..... )	Set	1	
07-03-02108	-Rack with 48V. d/c unit (duplicated).	Set	2	
07-03-02109	-Installation & Maintenance tools & materials.	Set	2	
07-03-02110	-Spare parts & spare units.	Set	2	
07-03-02111	-Documentation.	Set	1	
07-03-02119	Microwave Antennas	Lot	1	
07-03-02120	-Parabolic Dish ( 2.4-3 ) m. diameter .	Set	1	
07-03-02121	-Antenna Radiation Element with ( 1 / 2 )Ports.	Set	1	
07-03-02122	-Connector Flanges.	Set	1	
07-03-02123	-Tower Attachment.	Set	1	
07-03-02124	-Installation & Maintenance tools & materials.	Set	1	
<b>07-03-02125</b>	<b>Radome</b>	<b>Set</b>	<b>1</b>	
07-03-02129	Microwave Feeders	Lot	1	
07-03-02130	-Elliptical waveguide for 13/11 GHZ band .	Meter	100	
07-03-02131	-Medium capacity dehydrator.	Unit	1	
07-03-02132	-Pressure Window.	Unit	1	
07-03-02133	-Fixture clamps.		<b>100</b>	
07-03-02134	-Earthing Kits.	Set	<b>2</b>	
07-03-02135	-Installation materials & tools.	Set	1	
07-03-02136	-Documentation.	Set	1	
07-03-02139	DC Power Plant	Lot	1	
07-03-02140	-Modular switched rectifier system 48V / 30Ampere module (10+2) configuration.	Set	1	
07-03-02141	-48V,1000Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-03-02142	-Cabinet.	Set	4	
07-03-02143	-Installation materials , cables, tools.	Set	1	
07-03-02144	- Documentation.	Set	1	
07-03-02149	Air Conditioners	Lot	1	
07-03-02150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-03-02151	-Piping & installation materials & fixtures.	Set	2	
07-03-02152	-Spare parts.	Set	2	
07-03-02153	-Documentation.	Set	2	
07-03-02159	Diesel Engine Generator	Lot	1	

07-03-02160	-Capacity 50 KVA, Dual Set.	Set	1	
07-03-02161	-Daily Fuel Tank.	Set	1	
07-03-02162	-Fan.	Set	1	
07-03-02163	-Piping.	Set	1	
07-03-02164	-Control cubicle & Alarms.	Set	1	
07-03-02165	-Installation Materials & Tools.	Set	1	
07-03-02166	-Spare parts & PCB's.	Set	1	
07-03-02167	-Documentation.	Set	1	
07-03-02169	SDH Multiplex Equipment	Lot	1	
07-03-02170	-STM-4 Multiplexer Subrack with redundant common units	Set	4	
07-03-02171	-STM-1 Multiplex Subrack with redundant common units	Set	2	
07-03-02172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	10	
07-03-02173	-Access & Connection Modules.	Set	6	
07-03-02174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	6	
07-03-02175	-Full Matrix ( duplicated).	Unit	6	
07-03-02176	-Auxiliary /Engineering order wire.	Set	2	
07-03-02177	-Telephone Handset.	Lot	2	
07-03-02178	-Installation Materials & Tools.	Lot	2	
07-03-02179	-Racks with power supply unit (duplicated)and cable head.	Set	6	
07-03-02180	-Digital Distribution Frames.	Set	6	
07-03-02181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	16	
07-03-02182	-Equipment craft terminal for programmed control and display with operation software .	Set	2	
07-03-02183	-Spare parts & spare units.	Lot	6	
07-03-02184	-Installation materials & tools.	Lot	2	
07-03-02185	-Documentation.	Set	2	
<b>07-03-02186</b>	<b>- Tributary Units (1x34Mb/s, 34M SW).</b>	<b>SET</b>	<b>3</b>	
<b>07-03-02187-1</b>	<b>4W 1E&amp;M Channel units for 2M Primary Multiplex.</b>	<b>EA</b>	<b>6</b>	
<b>07-03-02187-3</b>	<b>- 2W FXS Channel units for 2M Primary Multiplex.</b>	<b>EA</b>	<b>12</b>	
07-03-02189	Network Management Equipment	Lot	1	
07-03-02190	-Central Network Management System platform(Hardware)	Lot	1	
07-03-02191		Set	1	
07-03-02192	-Central Network Management System software packages.	Lot	1	
07-03-02193	-Local Network Management Equipment ( craft terminals).	Lot	1	
07-03-02194	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-03-02195	-Installation Materials & Tools.	Set	1	
	-Documentation..			
<b>07-03-02199</b>	Test Instruments	Lot	1	
07-03-02200	-Digital Multimeter.	Set	2	
07-03-02201	-Frequency Counter .	Set	1	
07-03-02202	-Power Meter .	Set	1	
07-03-02203	-PCM Multiplex Tester .	Set	1	
07-03-02204	-RF Sweep Generator .	Set	0	

07-03-02205	-VSWR Test Set.	Set	0	
07-03-02206	-Scalar Network Analyzer .	Set	0	
07-03-02207	-RF Spectrum Analyzer.	Set	0	
07-03-02208	-SDH Analyzer for STM-1.	Set	1	
07-03-02209	-TX / RX MW Link Analyzer .	Set	0	
07-03-02210	-PDH Analyzer ( 2-140Mb/s ).	Set	1	
07-03-02211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-03-02212	-Vedio Test Set.	Set	0	
07-03-02213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.	Set	0	
07-03-02214	-Cables & Adapters.	Set	2	
07-03-02215	-Waveguide / Coax. Adapters.	Set	0	
07-03-02216	-Documentation.	Set	1	
07-03-02219	Specific Tools	Lot	1	
07-03-02220	-20 Ton Lorry with crane & winch.	Unit	0	
07-03-02221	-Specific Maintenance Tools	Lot	1	
07-03-02222	-Station Tools	Lot	1	
07-03-02223	-Special Tools for waveguide.	Lot	1	
07-03-02224	-Installation Tools.	Lot	1	
07-03-02229	Services	Lot	1	
07-03-02230	-Factory Training Abroad.	Trainee	4	
07-03-02231	-Training In Iraq.	Trainee	8	
07-03-02232	-Supervision Services (Supplier Expert).	Expert	2	
<b>07-03-02249</b>	<b>Vedio/Sound Equipment</b>	<b>LOT</b>	<b>1</b>	
<b>07-03-02257</b>	<b>1 Decoders(2x Video 34Mb/s plus 4 sound channels/each)</b>	<b>LOT</b>	<b>1</b>	

**ANNEX SEVEN / TRANSPORT & COMMUNICATIONS / TELECOMMUNICATIONS**

**Sub - sector :East Digital Microwave Link**

**Site - Name : BENI - SAAD**

<b>Code</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Complementary Items</b>
07-03-03100	SDH Microwave Radio Equipment	Lot	1	
07-03-03101	-STM-1, 8/6GHZ (3+1), Radio Terminal With Frequency & Space Diversity all complete.	Set	2	
07-03-03102	-128 QAM Modems Modules.	Set	8	
07-03-03103	-Protection Switch.	Set	2	
07-03-03104	-Engineering order wire channel.	Set	2	
07-03-03105	-2Mb/s auxiliary traffic.	Set	2	
07-03-03106	-Interface to central Network management.	Set	2	
07-03-03107	-Peripherals ( Lap Top PC , ETC..... )	Set	1	
07-03-03108	-Rack with 48V. d/c unit (duplicated ).	Set	<b>6</b>	
07-03-03109	-Installation & Maintenance tools & materials.	Set	2	
07-03-03110	-Spare parts & spare units.	Set	2	
07-03-03111	-Documentation.	Set	1	
07-03-03119	Microwave Antennas	Lot	1	
07-03-03120	-Parabolic Dish ( 3-3.7)m. diameter .	Set	4	
07-03-03121	-Antenna Radiation Element with ( 1 / 2 )Ports.	Set	4	
07-03-03122	-Connector Flanges.	Set	4	
07-03-03123	-Tower Attachment.	Set	4	
07-03-03124	-Installation & Maintenance tools & materials.	Set	4	
<b>07-03-03125</b>	<b>Radome</b>	<b>SET</b>	<b>3</b>	
07-03-03129	Microwave Feeders	Lot	1	
07-03-03130	-Elliptical waveguide for 8/6 GHZ band .	Meter	<b>400</b>	
07-03-03131	-Medium capacity dehydrator.	Unit	1	
07-03-03132	-Pressure Window.	Unit	6	
07-03-03133	-Fixture clamps.		<b>400</b>	
07-03-03134	-Earthing Kits.	Set	<b>12</b>	
07-03-03135	-Installation materials & tools.	Set	<b>3</b>	
07-03-03136	-Documentation.	Set	1	
07-03-03139	DC Power Plant	Lot	1	
07-03-03140	-Modular switched rectifier system 48V / 30Ampere module (5+1) configuration.	Set	1	
07-03-03141	-48V, 500Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-03-03142	-Cabinet.	Set	2	
07-03-03143	-Installation materials , cables, tools.	Set	1	
07-03-03144	-Documentation.	Set	1	
07-03-03149	Air Conditioners	Lot	1	
07-03-03150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-03-03151	-Piping & installation materials & fixtures.	Set	2	
07-03-03152	-Spare parts.	Set	2	
07-03-03153	-Documentation.	Set	2	
07-03-03159	Diesel Engine Generator	Lot	1	
07-03-03160	-Capacity 50 KVA, Dual Set.	Set	1	

07-03-03161	-Daily Fuel Tank.	Set	1	
07-03-03162	-Fan.	Set	1	
07-03-03163	-Piping.	Set	1	
07-03-03164	-Control cubicle & Alarms.	Set	1	
07-03-03165	-Installation Materials & Tools.	Set	1	
07-03-03166	-Spare parts & PCB's.	Set	1	
07-03-03167	-Documentation.	Set	1	
07-03-03169	SDH Multiplex Equipment	Lot	1	
07-03-03170	-STM-4 Multiplexer Subrack with redundant common units	Set	4	
07-03-03171	-STM-1 Multiplex Subrack with redundant common units	Set	2	
07-03-03172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	10	
07-03-03173	-Access & Connection Modules.	Set	6	
07-03-03174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	0	
07-03-03175	-Full Matrix ( duplicated).	Unit	6	
07-03-03176	-Auxiliary /Engineering order wire.	Set	2	
07-03-03177	-Telephone Handset.	Lot	2	
07-03-03178	-Installation Materials & Tools.	Lot	2	
07-03-03179	-Racks with power supply unit (duplicated)and cable head.	Set	2	
07-03-03180	-Digital Distribution Frames.	Set	2	
07-03-03181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-03-03182	-Equipment craft terminal for programmed control and display with operation software .	Set	2	
07-03-03183	-Spare parts & spare units.	Unit	2	
07-03-03184	-Installation materials & tools.	Lot	2	
07-03-03185	-Documentation.	Set	1	
<b>07-03-03187-1</b>	<b>- 4W 1E&amp;M Channel units for 2M Primary Multiplex.</b>	<b>EA</b>	<b>3</b>	
<b>07-03-03187-3</b>	<b>2W FXS Channel units for 2M Primary Multiplex.</b>	<b>EA</b>	<b>6</b>	
07-03-03189	Network Management Equipment	Lot	1	
07-03-03190	-Central Network Management System platform(Hardware)	Lot	0	
07-03-03191		Set	0	
07-03-03192	-Central Network Management System software packages.	Lot	1	
07-03-03193	-Local Network Management Equipment ( craft terminals).	Lot	1	
07-03-03194	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-03-03195	-Installation Materials & Tools. -Documentation..	Set	1	
07-03-03119	Test Instruments	Lot	1	
07-03-03200	-Digital Multimeter.	Set	2	
07-03-03201	-Frequency Counter .	Set	1	
07-03-03202	-Power Meter .	Set	1	
07-03-03203	-PCM Multiplex Tester .	Set	1	
07-03-03204	-RF Sweep Generator .	Set	0	
07-03-03205	-VSWR Test Set.	Set	0	
07-03-03206	-Scalar Network Analyzer .	Set	0	
07-03-03207	-RF Spectrum Analyzer.	Set	0	

07-03-03208	-SDH Analyzer for STM-1.	Set	0	
07-03-03209	-TX / RX MW Link Analyzer .	Set	0	
07-03-03210	-PDH Analyzer ( 2Mb/s ).	Set	0	
07-03-03211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-03-03212	-Vedio Test Set.	Set	0	
07-03-03213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.	Set	0	
07-03-03214	-Cables & Adapters.	Set	1	
07-03-03215	-Waveguide / Coax. Adapters.	Set	0	
07-03-03216	-Documentation.	Set	1	
07-03-03219	Specific Tools	Lot	1	
07-03-03220	-20 Ton Lorry with crane & winch.	Unit	0	
07-03-03221	-Specific Maintenance Tools	Lot	1	
07-03-03222	-Station Tools	Lot	1	
07-03-03223	-Special Tools for waveguide.	Lot	1	
07-03-03224	-Installation Tools.	Lot	1	
07-03-03229	Services	Lot	1	
07-03-03230	-Factory Training Abroad.	Trainee	2	
07-03-03231	-Training In Iraq.	Trainee	4	
07-03-03232	-Supervision Services (Supplier Expert).	Expert	1	
<b>07-03-03239</b>	<b>'Microwave Tower</b>	<b>Lot</b>	<b>1</b>	
<b>07-03-03240</b>	<b>-70m high self supporting tower main materal</b>	<b>Lot</b>	<b>1</b>	
<b>07-03-03241</b>	<b>'-Installation materials for self supporting tower</b>	<b>Lot</b>	<b>1</b>	

**ANNEX SEVEN / TRANSPORT & COMMUNICATIONS / TELECOMMUNICATIONS**

**Sub - sector : East Digital Microwave Link**

**Site - Name : BAQUBA T.**

<b>Code</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Complementary Items</b>
07-03-04100	SDH Microwave Radio Equipment	Lot	1	
07-03-04101	-STM-1,13/11/8/6GHZ (3+1),(1+1) Radio Terminal. With Frequency & Space Diversity all complete.	Set	3	
07-03-04102	-128 QAM Modems Modules.	Set	10	
07-03-04103	-Protection Switch.	Set	3	
07-03-04104	-Engineering order wire channel.	Set	3	
07-03-04105	-2Mb/s auxiliary traffic.	Set	3	
07-03-04106	-Interface to central Network management.	Set	3	
07-03-04107	-Peripherals ( Lap Top PC , ETC..... )	Set	1	
07-03-04108	-Rack with 48V. d/c unit (duplicated ).	Set	<b>8</b>	
07-03-04109	-Installation & Maintenance tools & materials.	Set	<b>3</b>	
07-03-04110	-Spare parts & spare units.	Set	2	
07-03-04111	-Documentation.	Set	1	
07-03-04119	Microwave Antennas	Lot	1	
07-03-04120	-Parabolic Dish ( 1.8m.-3.7m. diameter ).	Set	5	
07-03-04121	-Antenna Radiation Element with ( 1 / 2 )Ports.	Set	5	
07-03-04122	-Connector Flanges.	Set	5	
07-03-04123	-Tower Attachment.	Set	5	
07-03-04124	-Installation & Maintenance tools & materials.	Set	5	
<b>07-03-04125</b>	<b>Radome</b>	<b>Set</b>	<b>4</b>	
07-03-04129	Microwave Feeders	Lot	1	
07-03-04130	-Elliptical waveguide for 13/11/8/6 GHZ band .	Meter	<b>650</b>	
07-03-04131	-Medium capacity dehydrator.	Unit	1	
07-03-04132	-Pressure Window.	Unit	12	
07-03-04133	-Fixture clamps.		<b>650</b>	
07-03-04134	-Earthing Kits.	Set	<b>14</b>	
07-03-04135	-Installation materials & tools.	Set	<b>4</b>	
07-03-04136	-Documentation.	Set	1	
07-03-04139	DC Power Plant	Lot	1	
07-03-04140	-Modular switched rectifier system 48V / 30Ampere module (4+1) configuration.	Set	1	
07-03-04141	-48V, 350Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-03-04142	-Cabinet.	Set	2	
07-03-04143	-Installation materials , cables, tools.	Set	1	
07-03-04144	-Documentation.	Set	1	
07-03-04149	Air Conditioners	Lot	1	
07-03-04150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-03-04151	-Piping & installation materials & fixtures.	Set	<b>4</b>	
07-03-04152	-Spare parts.	Set	2	
07-03-04153	-Documentation.	Set	<b>4</b>	
07-03-04159	Diesel Engine Generator	Lot	1	

07-03-04160	-Capacity 50 KVA, Dual Set.	Set	1	
07-03-04161	-Daily Fuel Tank.	Set	1	
07-03-04162	-Fan.	Set	1	
07-03-04163	-Piping.	Set	1	
07-03-04164	-Control cubicle & Alarms.	Set	1	
07-03-04165	-Installation Materials & Tools.	Set	1	
07-03-04166	-Spare parts & PCB's.	Set	1	
07-03-04167	-Documentation.	Set	1	
07-03-04169	SDH Multiplex Equipment	Lot	1	
07-03-04170	-STM-4 Multiplexer Subrack with redundant common units	Set	2	
07-03-04171	-STM-1 Multiplex Subrack with redundant common units	Set	2	
07-03-04172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	2	
07-03-04173	-Access & Connection Modules.	Set	2	
07-03-04174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	3	
07-03-04175	-Full Matrix ( duplicated).	Unit	4	
07-03-04176	-Auxiliary /Engineering order wire.	Set	1	
07-03-04177	-Telephone Handset.	Lot	1	
07-03-04178	-Installation Materials & Tools.	Lot	2	
07-03-04179	-Racks with power supply unit (duplicated)and cable head.	Set	4	
07-03-04180	-Digital Distribution Frames.	Set	4	
07-03-04181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	2	
07-03-04182	-Equipment craft terminal for programmed control and display with operation soft ware .	Set	2	
07-03-04183	-Spare parts & spare units.	Lot	2	
07-03-04184	-Installation materials & tools.	Lot	2	
07-03-04185	-Documentation.	Set	1	
<b>07-03-04186</b>	<b>Tributary Units (1x34Mb/s, 34M SW).</b>	<b>Set</b>	<b>3</b>	
<b>07-03-04187-1</b>	<b>4W 1E&amp;M Channel units for 2M Primary Multiplex.</b>	<b>Ea</b>	<b>6</b>	
<b>07-03-04187-3</b>	<b>2W FXS Channel units for 2M Primary Multiplex.</b>	<b>ea</b>	<b>12</b>	
07-03-04189	Network Management Equipment	Lot	1	
07-03-04190	-Central Network Management System platform(Hard ware)	Lot	0	
07-03-04191		Set	0	
07-03-04192	-Central Network Management System software packages.	Lot	1	
07-03-04193	-Local Network Management Equipment ( craft terminals).	Lot	1	
07-03-04194	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-03-04195	-Installation Materials & Tools.	Set	1	
	-Documentation..			
07-03-04119	Test Instruments	Lot	1	
07-03-04200	-Digital Multimeter.	Set	1	
07-03-04201	-Frequency Counter .	Set	0	
07-03-04202	-Power Meter .	Set	1	
07-03-04203	-PCM Multiplex Tester .	Set	1	
07-03-04204	-RF Sweep Generator .	Set	0	
07-03-04205	-VSWR Test Set.	Set	0	

07-03-04206	-Scalar Network Analyzer .	Set	0	
07-03-04207	-RF Spectrum Analyzer.	Set	0	
07-03-04208	-SDH Analyzer for STM-1.	Set	0	
07-03-04209	-TX / RX MW Link Analyzer .	Set	0	
07-03-04210	-PDH Analyzer ( 2Mb/s ).	Set	0	
07-03-04211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-03-04212	-Vedio Test Set.	Set	0	
07-03-04213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.	Set	0	
07-03-04214	-Cables & Adapters.	Set	1	
07-03-04215	-Waveguide / Coax. Adapters.	Set	0	
07-03-04216	-Documentation.	Set	1	
07-03-04219	Specific Tools	Lot	1	
07-03-04220	-20 Ton Lorry with crane & winch.	Unit	0	
07-03-04221	-Specific Maintenance Tools	Lot	1	
07-03-04222	-Station Tools	Lot	1	
07-03-04223	-Special Tools for waveguide.	Lot	1	
07-03-04224	-Installation Tools.	Lot	1	
07-03-04229	Services	Lot	1	
07-03-04230	-Factory Training Abroad.	Trainee	1	
07-03-04231	-Training In Iraq.	Trainee	3	
07-03-04232	-Supervision Services (Supplier Expert).	Expert	1	
<b>07-03-04249</b>	<b>Vedio/Sound Equipment</b>	<b>Lot</b>	<b>1</b>	
<b>07-03-04255</b>	<b>1 Encoders(2x Video 34Mb/s plus 4 sound channels/each)and 2 Decoders(2x Video 34Mb/s plus 4 sound channels/each)</b>	<b>Lot</b>	<b>1</b>	

**ANNEX SEVEN / TRANSPORT & COMMUNICATIONS / TELECOMMUNICATIONS**

**Sub - sector : East Digital Microwave Link**

**Site - Name : TUZ**

<b>Code</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Complementary Items</b>
07-03-05100	SDH Microwave Radio Equipment	Lot	1	
07-03-05101	-STM-1, 8 / 6GHZ (3+1), Radio Terminal With Frequency & Space Diversity all complete.	Set	2	
07-03-05102	-128 QAM Modems Modules.	Set	8	
07-03-05103	-Protection Switch.	Set	2	
07-03-05104	-Engineering order wire channel.	Set	1	
07-03-05105	-2Mb/s auxiliary traffic.	Set	2	
07-03-05106	-Interface to central Network management.	Set	2	
07-03-05107	-Peripherals ( Lap Top PC , ETC..... )	Set	1	
07-03-05108	-Rack with 48V. d/c unit (duplicated ).	Set	<b>6</b>	
07-03-05109	-Installation & Maintenance tools & materials.	Set	2	
07-03-05110	-Spare parts & spare units.	Set	2	
07-03-05111	-Documentation.	Set	1	
07-03-05119	Microwave Antennas	Lot	1	
07-03-05120	-Parabolic Dish ( 3-3.7) m. diameter .	Set	4	
07-03-05121	-Antenna Radiation Element with ( 1 / 2 )Ports.	Set	4	
07-03-05122	-Connector Flanges.	Set	4	
07-03-05123	-Tower Attachment.	Set	4	
07-03-05124	-Installation & Maintenance tools & materials.	Set	4	
<b>07-03-05125</b>	<b>Radome</b>	<b>Set</b>	<b>4</b>	
07-03-05129	Microwave Feeders	Lot	1	
07-03-05130	-Elliptical waveguide for 8/6 GHZ band .	Meter	400	
07-03-05131	-Medium capacity dehydrator.	Unit	1	
07-03-05132	-Pressure Window.	Unit	8	
07-03-05133	-Fixture clamps.		<b>200</b>	
07-03-05134	-Earthing Kits.		<b>16</b>	
07-03-05135	-Installation materials & tools.	Set	<b>4</b>	
07-03-05136	-Documentation.	Set	1	
07-03-05139	DC Power Plant	Lot	1	
07-03-05140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.	Set	1	
07-03-05141	-48V, 250Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-03-05142	-Cabinet.	Set	2	
07-03-05143	-Installation materials , cables, tools.	Set	1	
07-03-05144	-Documentation.	Set	1	
07-03-05149	Air Conditioners	Lot	1	
07-03-05150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-03-05151	-Piping & installation materials & fixtures.	Set	2	
07-03-05152	-Spare parts.	Set	2	
07-03-05153	-Documentation.	Set	2	
07-03-05159	Diesel Engine Generator	Lot	1	

07-03-05160	-Capacity 50 KVA, Dual Set.	Set	1	
07-03-05161	-Daily Fuel Tank.	Set	1	
07-03-05162	-Fan.	Set	1	
07-03-05163	-Piping.	Set	1	
07-03-05164	-Control cubicle & Alarms.	Set	1	
07-03-05165	-Installation Materials & Tools.	Set	1	
07-03-05166	-Spare parts & PCB's.	Set	1	
07-03-05167	-Documentation.	Set	1	
07-03-05169	SDH Multiplex Equipment	Lot	1	
07-03-05170	-STM-4 Multiplexer Subrack with redundant common units	Set	2	
07-03-05171	-STM-1 Multiplex Subrack with redundant common units	Set	1	
07-03-05172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	3	
07-03-05173	-Access & Connection Modules.	Set	2	
07-03-05174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	0	
07-03-05175	-Full Matrix ( duplicated).	Unit	4	
07-03-05176	-Auxiliary /Engineering order wire.	Set	1	
07-03-05177	-Telephone Handset.	Lot	1	
07-03-05178	-Installation Materials & Tools.	Lot	2	
07-03-05179	-Racks with power supply unit (duplicated)and cable head.	Set	4	
07-03-05180	-Digital Distribution Frames.	Set	4	
07-03-05181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	4	
07-03-05182	-Equipment craft terminal for programmed control and display with operation soft ware .	Set	2	
07-03-05183	-Spare parts & spare units.	Lot	2	
07-03-05184	-Installation materials & tools.	Lot	2	
07-03-05185	-Documentation.	Set	1	
<b>07-03-05187-1</b>	<b>4W 1E&amp;M Channel units for 2M Primary Multiplex.</b>	<b>Ea</b>	<b>3</b>	
<b>07-03-05187-3</b>	<b>2W FXS Channel units for 2M Primary Multiplex.</b>	<b>ea</b>	<b>6</b>	
07-03-05189	Network Management Equipment	Lot	1	
07-03-05190	-Central Network Management System platform(Hardware)	Lot	0	
07-03-05191		Set	0	
07-03-05192	-Central Network Management System software packages.	Lot	1	
07-03-05193	-Local Network Management Equipment ( craft terminals).	Lot	1	
07-03-05194	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-03-05195	-Installation Materials & Tools. -Documentation..	Set	1	
07-03-05119	Test Instruments	Lot	1	
07-03-05200	-Digital Multimeter.	Set	1	
07-03-05201	-Frequency Counter .	Set	1	
07-03-05202	-Power Meter .	Set	1	
07-03-05203	-PCM Multiplex Tester .	Set	1	
07-03-05204	-RF Sweep Generator .	Set	0	
07-03-05205	-VSWR Test Set.	Set	0	
07-03-05206	-Scalar Network Analyzer .	Set	0	

07-03-05207	-RF Spectrum Analyzer.	Set	0	
07-03-05208	-SDH Analyzer for STM-1.	Set	1	
07-03-05209	-TX / RX MW Link Analyzer .	Set	0	
07-03-05210	-PDH Analyzer ( 2Mb/s ).	Set	0	
07-03-05211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-03-05212	-Vedio Test Set.	Set	0	
07-03-05213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.	Set	1	
07-03-05214	-Cables & Adapters.	Set	1	
07-03-05215	-Waveguide / Coax. Adapters.	Set	1	
07-03-05216	-Documentation.	Set	1	
07-03-05219	Specific Tools	Lot	1	
07-03-05220	-20 Ton Lorry with crane & winch.	Unit	0	
07-03-05221	-Specific Maintenance Tools	Lot	1	
07-03-05222	-Station Tools	Lot	1	
07-03-05223	-Special Tools for waveguide.	Lot	1	
07-03-05224	-Installation Tools.	Lot	1	
07-03-05229	Services	Lot	1	
07-03-05230	-Factory Training Abroad.	Trainee	2	
07-03-05231	-Training In Iraq.	Trainee	4	
07-03-05232	-Supervision Services (Supplier Expert).	Expert	1	

**ANNEX SEVEN / TRANSPORT & COMMUNICATIONS / TELECOMMUNICATIONS**

**Sub - sector : East Digital Microwave Link**

**Site - Name : SHAIK SHENAIF**

<b>Code</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Complementary Items</b>
07-03-06100	SDH Microwave Radio Equipment	Lot	1	
07-03-06101	-STM-1, 8/6GHZ (3+1), (1+1) Radio Terminal. With Frequency & Space Diversity all complete.	Set	2	
07-03-06102	-128 QAM Modems Modules.	Set	8	
07-03-06103	-Protection Switch.	Set	2	
07-03-06104	-Engineering order wire channel.	Set	2	
07-03-06105	-2Mb/s auxiliary traffic.	Set	2	
07-03-06106	-Interface to central Network management.	Set	2	
07-03-06107	-Peripherals ( Lap Top PC , ETC..... )	Set	1	
07-03-06108	-Rack with 48V. d/c unit (duplicated ).	Set	<b>6</b>	
07-03-06109	-Installation & Maintenance tools & materials.	Set	2	
07-03-06110	-Spare parts & spare units.	Set	2	
07-03-06111	-Documentation.	Set	1	
07-03-06119	Microwave Antennas	Lot	1	
07-03-06120	-Parabolic Dish ( 3-3.7m. diameter ).	Set	4	
07-03-06121	-Antenna Radiation Element with ( 1 / 2 )Ports.	Set	4	
07-03-06122	-Connector Flanges.	Set	4	
07-03-06123	-Tower Attachment.	Set	4	
07-03-06124	-Installation & Maintenance tools & materials.	Set	4	
<b>07-03-06125</b>	<b>Radome</b>	<b>Set</b>	<b>4</b>	
07-03-06129	Microwave Feeders	Lot	1	
07-03-06130	-Elliptical waveguide for 8/6 GHZ band .	Meter	400	
07-03-06131	-Medium capacity dehydrator.	Unit	1	
07-03-06132	-Pressure Window.	Unit	<b>8</b>	
07-03-06133	-Fixture clamps.		<b>400</b>	
07-03-06134	-Earthing Kits.		<b>16</b>	
07-03-06135	-Installation materials & tools.	Set	<b>4</b>	
07-03-06136	-Documentation.	Set	1	
07-03-06139	DC Power Plant	Lot	1	
07-03-06140	-Modular switched rectifier system 48V / 30Ampere module (4+1) configuration.	Set	1	
07-03-06141	-48V, 300Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-03-06142	-Cabinet.	Set	2	
07-03-06143	-Installation materials , cables, tools.	Set	1	
07-03-06144	-Documentation.	Set	1	
07-03-06149	Air Conditioners	Lot	1	
07-03-06150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-03-06151	-Piping & installation materials & fixtures.	Set	2	
07-03-06152	-Spare parts.	Set	2	
07-03-06153	-Documentation.	Set	2	
07-03-06159	Diesel Engine Generator	Lot	1	

07-03-06160	-Capacity 50 KVA, Dual Set.	Set	1	
07-03-06161	-Daily Fuel Tank.	Set	1	
07-03-06162	-Fan.	Set	1	
07-03-06163	-Piping.	Set	1	
07-03-06164	-Control cubicle & Alarms.	Set	1	
07-03-06165	-Installation Materials & Tools.	Set	1	
07-03-06166	-Spare parts & PCB's.	Set	1	
07-03-06167	-Documentation.	Set	1	
07-03-06169	SDH Multiplex Equipment	Lot	1	
07-03-06170	-STM-4 Multiplexer Subrack with redundant common units	Set	2	
07-03-06171	-STM-1 Multiplex Subrack with redundant common units	Set	1	
07-03-06172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	3	
07-03-06173	-Access & Connection Modules.	Set	2	
07-03-06174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	6	
07-03-06175	-Full Matrix ( duplicated).	Unit	4	
07-03-06176	-Auxiliary /Engineering order wire.	Set	1	
07-03-06177	-Telephone Handset.	Lot	1	
07-03-06178	-Installation Materials & Tools.	Lot	2	
07-03-06179	-Racks with power supply unit (duplicated)and cable head.	Set	4	
07-03-06180	-Digital Distribution Frames.	Set	4	
07-03-06181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-03-06182	-Equipment craft terminal for programmed control and display with operation software .	Set	2	
07-03-06183	-Spare parts & spare units.	Lot	2	
07-03-06184	-Installation materials & tools.	Lot	2	
07-03-06185	-Documentation.	Set	1	
<b>07-03-06187-1</b>	<b>4W 1E&amp;M Channel units for 2M Primary Multiplex.</b>	<b>Ea</b>	<b>3</b>	
<b>07-03-06187-3</b>	<b>2W FXS Channel units for 2M Primary Multiplex.</b>	<b>ea</b>	<b>6</b>	
07-03-06189	Network Management Equipment	Lot	1	
07-03-06190	-Central Network Management System platform(Hardware)	Lot	0	
07-03-06191		Set	0	
07-03-06192	-Central Network Management System software packages.	Lot	1	
07-03-06193	-Local Network Management Equipment ( craft terminals).	Lot	1	
07-03-06194	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-03-06195	-Installation Materials & Tools. -Documentation..	Set	1	
07-03-06119	Test Instruments	Lot	1	
07-03-06200	-Digital Multimeter.	Set	1	
07-03-06201	-Frequency Counter .	Set	0	
07-03-06202	-Power Meter .	Set	0	
07-03-06203	-PCM Multiplex Tester .	Set	1	
07-03-06204	-RF Sweep Generator .	Set	0	
07-03-06205	-VSWR Test Set.	Set	0	
07-03-06206	-Scalar Network Analyzer .	Set	0	

07-03-06207	-RF Spectrum Analyzer.	Set	0	
07-03-06208	-SDH Analyzer for STM-1.	Set	0	
07-03-06209	-TX / RX MW Link Analyzer .	Set	0	
07-03-06210	-PDH Analyzer ( 2Mb/s ).	Set	0	
07-03-06211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-03-06212	-Vedio Test Set.	Set	0	
07-03-06213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.	Set	0	
07-03-06214	-Cables & Adapters.	Set	1	
07-03-06215	-Waveguide / Coax. Adapters.	Set	1	
07-03-06216	-Documentation.	Set	1	
07-03-06219	Specific Tools	Lot	1	
07-03-06220	-20 Ton Lorry with crane & winch.	Unit	0	
07-03-06221	-Specific Maintenance Tools	Lot	1	
07-03-06222	-Station Tools	Lot	1	
07-03-06223	-Special Tools for waveguide.	Lot	1	
07-03-06224	-Installation Tools.	Lot	1	
07-03-06229	Services	Lot	1	
07-03-06230	-Factory Training Abroad.	Trainee	1	
07-03-06231	-Training In Iraq.	Trainee	3	
07-03-06232	-Supervision Services (Supplier Expert).	Expert	1	

**ANNEX SEVEN / TRANSPORT & COMMUNICATIONS / TELECOMMUNICATIONS**

**Sub - sector : East Digital Microwave Link**

**Site - Name : INJANA**

<b>Code</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Complementary Items</b>
07-03-07100	SDH Microwave Radio Equipment	Lot	1	
07-03-07101	-STM-1, 8 / 6GHZ (3+1), Radio Terminal With Frequency & Space Diversity all complete.	Set	2	
07-03-07102	-128 QAM Modems Modules.	Set	8	
07-03-07103	-Protection Switch.	Set	2	
07-03-07104	-Engineering order wire channel.	Set	2	
07-03-07105	-2Mb/s auxiliary traffic.	Set	2	
07-03-07106	-Interface to central Network management.	Set	2	
07-03-07107	-Peripherals ( Lap Top PC , ETC..... )	Set	1	
07-03-07108	-Rack with 48V. d/c unit (duplicated ).	Set	3	
07-03-07109	-Installation & Maintenance tools & materials.	Set	2	
07-03-07110	-Spare parts & spare units.	Set	2	
07-03-07111	-Documentation.	Set	1	
07-03-07119	Microwave Antennas	Lot	1	
07-03-07120	-Parabolic Dish ( 3 -3.7m. diameter ).	Set	4	
07-03-07121	-Antenna Radiation Element with ( 1 / 2 )Ports.	Set	4	
07-03-07122	-Connector Flanges.	Set	4	
07-03-07123	-Tower Attachment.	Set	4	
07-03-07124	-Installation & Maintenance tools & materials.	Set	4	
<b>07-03-07125</b>	<b>Radome</b>	<b>Set</b>	<b>4</b>	
07-03-07129	Microwave Feeders	Lot	1	
07-03-07130	-Elliptical waveguide for 8/6 GHZ band .	Meter	400	
07-03-07131	-Medium capacity dehydrator.	Unit	1	
07-03-07132	-Pressure Window.	Unit	<b>8</b>	
07-03-07133	-Fixture clamps.	Set	<b>200</b>	
07-03-07134	-Earthing Kits.	Set	<b>16</b>	
07-03-07135	-Installation materials & tools.	Set	4	
07-03-07136	-Documentation.	Set	1	
07-03-07139	DC Power Plant	Lot	1	
07-03-07140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.	Set	1	
07-03-07141	-48V, 300Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-03-07142	-Cabinet.	Set	2	
07-03-07143	-Installation materials , cables, tools.	Set	1	
07-03-07144	-Documentation.	Set	1	
07-03-07149	Air Conditioners	Lot	1	
07-03-07150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-03-07151	-Piping & installation materials & fixtures.	Set	2	
07-03-07152	-Spare parts.	Set	2	
07-03-07153	-Documentation.	Set	2	
07-03-07159	Diesel Engine Generator	Lot	1	

07-03-07160	-Capacity 50 KVA, Dual Set.	Set	1	
07-03-07161	-Daily Fuel Tank.	Set	1	
07-03-07162	-Fan.	Set	1	
07-03-07163	-Piping.	Set	1	
07-03-07164	-Control cubicle & Alarms.	Set	1	
07-03-07165	-Installation Materials & Tools.	Set	1	
07-03-07166	-Spare parts & PCB's.	Set	1	
07-03-07167	-Documentation.	Set	1	
07-03-07169	SDH Multiplex Equipment	Lot	1	
07-03-07170	-STM-4 Multiplexer Subrack with redundant common units	Set	2	
07-03-07171	-STM-1 Multiplex Subrack with redundant common units	Set	0	
07-03-07172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	4	
07-03-07173	-Access & Connection Modules.	Set	2	
07-03-07174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	6	
07-03-07175	-Full Matrix ( duplicated).	Unit	4	
07-03-07176	-Auxiliary /Engineering order wire.	Set	1	
07-03-07177	-Telephone Handset.	Lot	1	
07-03-07178	-Installation Materials & Tools.	Lot	2	
07-03-07179	-Racks with power supply unit (duplicated)and cable head.	Set	4	
07-03-07180	-Digital Distribution Frames.	Set	4	
07-03-07181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	3	
07-03-07182	-Equipment craft terminal for programmed control and display with operation soft ware .	Set	2	
07-03-07183	-Spare parts & spare units.	Lot	2	
07-03-07184	-Installation materials & tools.	Lot	2	
07-03-07185	-Documentation.	Set	1	
<b>07-03-07187-1</b>	<b>4W 1E&amp;M Channel units for 2M Primary Multiplex.</b>	<b>Ea</b>	<b>3</b>	
<b>07-03-07187-3</b>	<b>- 2W FXS Channel units for 2M Primary Multiplex.</b>	<b>ea</b>	<b>6</b>	
07-03-07189	Network Management Equipment	Lot	1	
07-03-07190	-Central Network Management System platform(Hardware)	Lot	0	
07-03-07191		Set	0	
07-03-07192	-Central Network Management System software packages.	Lot	1	
07-03-07193	-Local Network Management Equipment ( craft terminals).	Lot	1	
07-03-07194	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-03-07195	-Installation Materials & Tools. -Documentation..	Set	1	
07-03-07119	Test Instruments	Lot	1	
07-03-07200	-Digital Multimeter.	Set	1	
07-03-07201	-Frequency Counter .	Set	0	
07-03-07202	-Power Meter .	Set	0	
07-03-07203	-PCM Multiplex Tester .	Set	1	
07-03-07204	-RF Sweep Generator .	Set	0	
07-03-07205	-VSWR Test Set.	Set	0	
07-03-07206	-Scalar Network Analyzer .	Set	0	

07-03-07207	-RF Spectrum Analyzer.	Set	0	
07-03-07208	-SDH Analyzer for STM-1.	Set	0	
07-03-07209	-TX / RX MW Link Analyzer .	Set	0	
07-03-07210	-PDH Analyzer ( 2Mb/s ).	Set	0	
07-03-07211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-03-07212	-Vedio Test Set.	Set	0	
07-03-07213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.	Set	0	
07-03-07214	-Cables & Adapters.	Set	1	
07-03-07215	-Waveguide / Coax. Adapters.	Set	1	
07-03-07216	-Documentation.	Set	1	
07-03-07219	Specific Tools	Lot	1	
07-03-07220	-20 Ton Lorry with crane & winch.	Unit	0	
07-03-07221	-Specific Maintenance Tools	Lot	1	
07-03-07222	-Station Tools	Lot	1	
07-03-07223	-Special Tools for waveguide.	Lot	1	
07-03-07224	-Installation Tools.	Lot	1	
07-03-07229	Services	Lot	1	
07-03-07230	-Factory Training Abroad.	Trainee	1	
07-03-07231	-Training In Iraq.	Trainee	3	
07-03-07232	-Supervision Services (Supplier Expert).	Expert	1	

**ANNEX SEVEN / TRANSPORT & COMMUNICATIONS / TELECOMMUNICATIONS**

**Sub - sector : East Digital Microwave Link**

**Site - Name : DAQUQ**

<b>Code</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Complementary Items</b>
07-03-08100	SDH Microwave Radio Equipment	Lot	1	
07-03-08101	-STM-1, 8/6 GHZ (3+1) Radio Repeater With Frequency & Space Diversity all complete for 2 directions.	Set	1	
07-03-08102	-128 QAM Modems Modules.	Set	8	
07-03-08103	-Protection Switch.	Set	2	
07-03-08104	-Engineering order wire channel.	Set	2	
07-03-08105	-2Mb/s auxiliary traffic.	Set	2	
07-03-08106	-Interface to central Network management.	Set	2	
07-03-08107	-Peripherals ( Lap Top PC , ETC..... )	Set	1	
07-03-08108	-Rack with 48V. d/c unit (duplicated).	Set	<b>6</b>	
07-03-08109	-Installation & Maintenance tools & materials.	Set	2	
07-03-08110	-Spare parts & spare units.	Set	2	
07-03-08111	-Documentation.	Set	1	
07-03-08119	Microwave Antennas	Lot	1	
07-03-08120	-Parabolic Dish ( 3 -3.7m. diameter ).	Set	4	
07-03-08121	-Antenna Radiation Element with ( 1 / 2 )Ports.	Set	4	
07-03-08122	-Connector Flanges.	Set	4	
07-03-08123	-Tower Attachment.	Set	4	
07-03-08124	-Installation & Maintenance tools & materials.	Set	4	
<b>07-03-08125</b>	<b>Radome</b>	<b>Set</b>	<b>3</b>	
07-03-08129	Microwave Feeders	Lot	1	
07-03-08130	-Elliptical waveguide for 8/6 GHZ band .	Meter	400	
07-03-08131	-Medium capacity dehydrator.	Unit	1	
07-03-08132	-Pressure Window.	Unit	4	
07-03-08133	-Fixture clamps.		<b>200</b>	
07-03-08134	-Earthing Kits.		<b>12</b>	
07-03-08135	-Installation materials & tools.	Set	4	
07-03-08136	-Documentation.	Set	1	
07-03-08139	DC Power Plant	Lot	1	
07-03-08140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.	Set	1	
07-03-08141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-03-08142	-Cabinet.	Set	2	
07-03-08143	-Installation materials , cables, tools.	Set	1	
07-03-08144	-Documentation.	Set	1	
07-03-08149	Air Conditioners	Lot	1	
07-03-08150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-03-08151	-Piping & installation materials & fixtures.	Set	2	
07-03-08152	-Spare parts.	Set	2	
07-03-08153	-Documentation.	Set	2	
07-03-08159	Diesel Engine Generator	Lot	1	

07-03-08160	-Capacity 50 KVA, Dual Set.	Set	1	
07-03-08161	-Daily Fuel Tank.	Set	1	
07-03-08162	-Fan.	Set	1	
07-03-08163	-Piping.	Set	1	
07-03-08164	-Control cubicle & Alarms.	Set	1	
07-03-08165	-Installation Materials & Tools.	Set	1	
07-03-08166	-Spare parts & PCB's.	Set	1	
07-03-08167	-Documentation.	Set	1	
07-03-08169	SDH Multiplex Equipment	Lot	1	
07-03-08170	-STM-4 Multiplexer Subrack with redundant common units	Set	0	
07-03-08171	-STM-1 Multiplex Subrack with redundant common units	Set	0	
07-03-08172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	0	
07-03-08173	-Access & Connection Modules.	Set	0	
07-03-08174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	0	
07-03-08175	-Full Matrix ( duplicated).	Unit	0	
07-03-08176	-Auxiliary /Engineering order wire.	Set	0	
07-03-08177	-Telephone Handset.	Lot	0	
07-03-08178	-Installation Materials & Tools.	Lot	0	
07-03-08179	-Racks with power supply unit (duplicated)and cable head.	Set	1	
07-03-08180	-Digital Distribution Frames.	Set	1	
07-03-08181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-03-08182	-Equipment craft terminal for programmed control and display with operation soft ware .	Set	0	
07-03-08183	-Spare parts & spare units.	Lot	1	
07-03-08184	-Installation materials & tools.	Lot	1	
07-03-08185	-Documentation.	Set	1	
<b>07-03-08187-1</b>	<b>4W 1E&amp;M Channel units for 2M Primary Multiplex.</b>	<b>Ea</b>	<b>3</b>	
<b>07-03-08187-3</b>	<b>'- 2W FXS Channel units for 2M Primary Multiplex.</b>	<b>ea</b>	<b>6</b>	
07-03-08189	Network Management Equipment	Lot	0	
07-03-08190	-Central Network Management System platform(Hardware)	Lot	0	
07-03-08191		Set	0	
07-03-08192	-Central Network Management System software packages.	Lot	0	
07-03-08193	-Local Network Management Equipment ( craft terminals).	Lot	0	
07-03-08194	-Mediation , Interface, and connection cards &modules.	Lot	0	
07-03-08195	-Installation Materials & Tools. -Documentation..	Set	0	
07-03-08119	Test Instruments	Lot	0	
07-03-08200	-Digital Multimeter.	Set	0	
07-03-08201	-Frequency Counter .	Set	0	
07-03-08202	-Power Meter .	Set	0	
07-03-08203	-PCM Multiplex Tester .	Set	0	
07-03-08204	-RF Sweep Generator .	Set	0	
07-03-08205	-VSWR Test Set.	Set	0	
07-03-08206	-Scalar Network Analyzer .	Set	0	

07-03-08207	-RF Spectrum Analyzer.	Set	0	
07-03-08208	-SDH Analyzer for STM-1.	Set	0	
07-03-08209	-TX / RX MW Link Analyzer .	Set	0	
07-03-08210	-PDH Analyzer ( 2Mb/s ).	Set	0	
07-03-08211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-03-08212	-Vedio Test Set.	Set	0	
07-03-08213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.	Set	0	
07-03-08214	-Cables & Adapters.	Set	0	
07-03-08215	-Waveguide / Coax. Adapters.	Set	0	
07-03-08216	-Documentation.	Set	0	
07-03-08219	Specific Tools	Lot	0	
07-03-08220	-20 Ton Lorry with crane & winch.	Unit	0	
07-03-08221	-Specific Maintenance Tools	Lot	0	
07-03-08222	-Station Tools	Lot	1	
07-03-08223	-Special Tools for waveguide.	Lot	0	
07-03-08224	-Installation Tools.	Lot	0	
07-03-08229	Services	Lot	1	
07-03-08230	-Factory Training Abroad.	Trainee	0	
07-03-08231	-Training In Iraq.	Trainee	0	
07-03-08232	-Supervision Services (Supplier Expert).	Expert	1	

**ANNEX SEVEN / TRANSPORT & COMMUNICATIONS / TELECOMMUNICATIONS**

**Sub - sector : East Digital Microwave Link**

**Site - Name : KIRKUK T.**

<b>Code</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Complementary Items</b>
07-03-09100	SDH Microwave Radio Equipment	Lot	1	
07-03-09101	-STM-1, 8/6GHZ (3+1), (1+1) Radio Terminal With Frequency & Space Diversity all complete.	Set	4	
07-03-09102	-128 QAM Modems Modules.	Set	14	
07-03-09103	-Protection Switch.	Set	4	
07-03-09104	-Engineering order wire channel.	Set	3	
07-03-09105	-2Mb/s auxiliary traffic.	Set	3	
07-03-09106	-Interface to central Network management.	Set	3	
07-03-09107	-Peripherals ( Lap Top PC , ETC..... )	Set	1	
07-03-09108	-Rack with 48V. d/c unit (duplicated ).	Set	8	
07-03-09109	-Installation & Maintenance tools & materials.	Set	3	
07-03-09110	-Spare parts & spare units.	Set	2	
07-03-09111	-Documentation.	Set	1	
07-03-09119	Microwave Antennas	Lot	1	
07-03-09120	-Parabolic Dish ( 1.8 -3.7m. diameter ).	Set	5	
07-03-09121	-Antenna Radiation Element with ( 1 / 2 )Ports.	Set	5	
07-03-09122	-Connector Flanges.	Set	5	
07-03-09123	-Tower Attachment.	Set	5	
07-03-09124	-Installation & Maintenance tools & materials.	Set	5	
<b>07-03-09125</b>	<b>Radome</b>	<b>Set</b>	<b>3</b>	
07-03-09129	Microwave Feeders	Lot	1	
07-03-09130	-Elliptical waveguide for 8/6 GHZ band .	Meter	500	
07-03-09131	-Medium capacity dehydrator.	Unit	1	
07-03-09132	-Pressure Window.	Unit	5	
07-03-09133	-Fixture clamps.		<b>500</b>	
07-03-09134	-Earthing Kits.	Set	<b>10</b>	
07-03-09135	-Installation materials & tools.	Set	3	
07-03-09136	-Documentation.	Set	1	
07-03-09139	DC Power Plant	Lot	1	
07-03-09140	-Modular switched rectifier system 48V / 30Ampere module (4+1) configuration.	Set	1	
07-03-09141	-48V, 300Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-03-09142	-Cabinet.	Set	2	
07-03-09143	-Installation materials , cables, tools.	Set	1	
07-03-09144	-Documentation.	Set	1	
07-03-09149	Air Conditioners	Lot	1	
07-03-09150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-03-09151	-Piping & installation materials & fixtures.	Set	2	
07-03-09152	-Spare parts.	Set	2	
07-03-09153	-Documentation.	Set	2	
07-03-09159	Diesel Engine Generator	Lot	1	

07-03-09160	-Capacity 50 KVA, Dual Set.	Set	1	
07-03-09161	-Daily Fuel Tank.	Set	1	
07-03-09162	-Fan.	Set	1	
07-03-09163	-Piping.	Set	1	
07-03-09164	-Control cubicle & Alarms.	Set	1	
07-03-09165	-Installation Materials & Tools.	Set	1	
07-03-09166	-Spare parts & PCB's.	Set	1	
07-03-09167	-Documentation.	Set	1	
07-03-09169	SDH Multiplex Equipment	Lot	1	
07-03-09170	-STM-4 Multiplexer Subrack with redundant common units	Set	2	
07-03-09171	-STM-1 Multiplex Subrack with redundant common units	Set	1	
07-03-09172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	3	
07-03-09173	-Access & Connection Modules.	Set	2	
07-03-09174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	7	
07-03-09175	-Full Matrix ( duplicated).	Unit	4	
07-03-09176	-Auxiliary /Engineering order wire.	Set	1	
07-03-09177	-Telephone Handset.	Lot	1	
07-03-09178	-Installation Materials & Tools.	Lot	2	
07-03-09179	-Racks with power supply unit (duplicated)and cable head.	Set	4	
07-03-09180	-Digital Distribution Frames.	Set	4	
07-03-09181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-03-09182	-Equipment craft terminal for programmed control and display with operation soft ware .	Set	2	
07-03-09183	-Spare parts & spare units.	Lot	2	
07-03-09184	-Installation materials & tools.	Lot	2	
07-03-09185	-Documentation.	Set	1	
07-03-0918				
<b>07-03-09186</b>	<b>'- Tributary Units (1x34Mb/s, 34M SW).</b>	<b>Set</b>	<b>3</b>	
<b>07-03-09187-2</b>	<b>'-2W FXO Channel units for 2M Primary Multiplex.</b>	<b>Ea</b>	<b>3</b>	
<b>07-03-09187-3</b>	<b>- 2W FXS Channel units for 2M Primary Multiplex.</b>	<b>Ea</b>	<b>1</b>	
07-03-09189	Network Management Equipment	Lot	1	
07-03-09190	-Central Network Management System platform(Hardware)	Lot	0	
07-03-09191		Set	0	
07-03-09192	-Central Network Management System software packages.	Lot	0	
07-03-09193	-Local Network Management Equipment ( craft terminals).	Lot	0	
07-03-09194	-Mediation , Interface, and connection cards &modules.	Lot	0	
07-03-09195	-Installation Materials & Tools.	Set	0	
	-Documentation..			
07-03-09119	Test Instruments	Lot	1	
07-03-09200	-Digital Multimeter.	Set	1	
07-03-09201	-Frequency Counter .	Set	0	
07-03-09202	-Power Meter .	Set	1	
07-03-09203	-PCM Multiplex Tester .	Set	1	
07-03-09204	-RF Sweep Generator .	Set	0	
07-03-09205	-VSWR Test Set.	Set	0	

07-03-09206	-Scalar Network Analyzer .	Set	0	
07-03-09207	-RF Spectrum Analyzer.	Set	0	
07-03-09208	-SDH Analyzer for STM-1.	Set	0	
07-03-09209	-TX / RX MW Link Analyzer .	Set	0	
07-03-09210	-PDH Analyzer ( 2 - 140Mb/s ).	Set	1	
07-03-09211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-03-09212	-Vedio Test Set.	Set	0	
07-03-09213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.	Set	1	
07-03-09214	-Cables & Adapters.	Set	1	
07-03-09215	-Waveguide / Coax. Adapters.	Set	1	
07-03-09216	-Documentation.	Set	1	
07-03-09219	Specific Tools	Lot	1	
07-03-09220	-20 Ton Lorry with crane & winch.	Unit	0	
07-03-09221	-Specific Maintenance Tools	Lot	1	
07-03-09222	-Station Tools	Lot	1	
07-03-09223	-Special Tools for waveguide.	Lot	1	
07-03-09224	-Installation Tools.	Lot	1	
07-03-09229	Services	Lot	1	
07-03-09230	-Factory Training Abroad.	Trainee	1	
07-03-09231	-Training In Iraq.	Trainee	3	
07-03-09232	-Supervision Services (Supplier Expert).	Expert	1	
<b>07-03-09249</b>	<b>Vedio/Sound Equipment</b>	<b>Lot</b>	<b>1</b>	
<b>07-03-09253</b>	<b>'- 1 Encoders(2x Video 34Mb/s plus 4 sound channels/each)and 2 Decoders(2x Video 34Mb/s plus 4 sound channels/each)and 2 Codecs sound channels</b>	<b>Lot</b>	<b>1</b>	

**ANNEX SEVEN / TRANSPORT & COMMUNICATIONS / TELECOMMUNICATIONS**

**Sub - sector : East Digital Microwave Link**

**Site - Name : HAWIJA**

<b>Code</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Complementary Items</b>
07-03-10100	SDH Microwave Radio Equipment	Lot	1	
07-03-10101	-STM-1, 8/6 GHZ (3+1) Radio Repeater With Frequency & Space Diversity all complete for 2 directions.	Set	1	
07-03-10102	-128 QAM Modems Modules.	Set	8	
07-03-10103	-Protection Switch.	Set	2	
07-03-10104	-Engineering order wire channel.	Set	2	
07-03-10105	-2Mb/s auxiliary traffic.	Set	3	
07-03-10106	-Interface to central Network management.	Set	2	
07-03-10107	-Peripherals ( Lap Top PC , ETC..... )	Set	1	
07-03-10108	-Rack with 48V. d/c unit (duplicated ).	Set	3	
07-03-10109	-Installation & Maintenance tools & materials.	Set	2	
07-03-10110	-Spare parts & spare units.	Set	2	
07-03-10111	-Documentation.	Set	1	
07-03-10119	Microwave Antennas	Lot	1	
07-03-10120	-Parabolic Dish ( 3 -3.7m. diameter ).	Set	4	
07-03-10121	-Antenna Radiation Element with ( 1 / 2 )Ports.	Set	4	
07-03-10122	-Connector Flanges.	Set	4	
07-03-10123	-Tower Attachment.	Set	4	
07-03-10124	-Installation & Maintenance tools & materials.	Set	4	
07-03-10129	Microwave Feeders	Lot	1	
07-03-10130	-Elliptical waveguide for 8/6 GHZ band .	Meter	400	
07-03-10131	-Medium capacity dehydrator.	Unit	1	
07-03-10132	-Pressure Window.	Unit	4	
07-03-10133	-Fixture clamps.	Set	4	
07-03-10134	-Earthing Kits.	Set	4	
07-03-10135	-Installation materials & tools.	Set	4	
07-03-10136	-Documentation.	Set	1	
07-03-10139	DC Power Plant	Lot	1	
07-03-10140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.	Set	1	
07-03-10141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-03-10142	-Cabinet.	Set	2	
07-03-10143	-Installation materials , cables, tools.	Set	1	
07-03-10144	-Documentation.	Set	1	
07-03-10149	Air Conditioners	Lot	1	
07-03-10150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-03-10151	-Piping & installation materials & fixtures.	Set	2	
07-03-10152	-Spare parts.	Set	2	
07-03-10153	-Documentation.	Set	2	
07-03-10159	Diesel Engine Generator	Lot	1	
07-03-10160	-Capacity 50 KVA, Dual Set.	Set	1	
07-03-10161	-Daily Fuel Tank.	Set	1	

07-03-10162	-Fan.	Set	1	
07-03-10163	-Piping.	Set	1	
07-03-10164	-Control cubicle & Alarms.	Set	1	
07-03-10165	-Installation Materials & Tools.	Set	1	
07-03-10166	-Spare parts & PCB's.	Set	1	
07-03-10167	-Documentation.	Set	1	
07-03-10169	SDH Multiplex Equipment	Lot	1	
07-03-10170	-STM-4 Multiplexer Subrack with redundant common units	Set	0	
07-03-10171	-STM-1 Multiplex Subrack with redundant common units	Set	0	
07-03-10172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	0	
07-03-10173	-Access & Connection Modules.	Set	0	
07-03-10174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	0	
07-03-10175	-Full Matrix ( duplicated).	Unit	0	
07-03-10176	-Auxiliary /Engineering order wire.	Set	0	
07-03-10177	-Telephone Handset.	Lot	0	
07-03-10178	-Installation Materials & Tools.	Lot	0	
07-03-10179	-Racks with power supply unit (duplicated)and cable head.	Set	1	
07-03-10180	-Digital Distribution Frames.	Set	1	
07-03-10181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	0	
07-03-10182	-Equipment craft terminal for programmed control and display with operation soft ware .	Set	0	
07-03-10183	-Spare parts & spare units.	Lot	1	
07-03-10184	-Installation materials & tools.	Lot	1	
07-03-10185	-Documentation.	Set	1	
07-03-10189	Network Management Equipment	Lot	0	
07-03-10190	-Central Network Management System platform(Hardware)	Lot	0	
07-03-10191		Set	0	
07-03-10192	-Central Network Management System software packages.	Lot	0	
07-03-10193	-Local Network Management Equipment ( craft terminals).	Lot	0	
07-03-10194	-Mediation , Interface, and connection cards &modules.	Lot	0	
07-03-10195	-Installation Materials & Tools.	Set	0	
	-Documentation..			
07-03-10119	Test Instruments	Lot	0	
07-03-10200	-Digital Multimeter.	Set	0	
07-03-10201	-Frequency Counter .	Set	0	
07-03-10202	-Power Meter .	Set	0	
07-03-10203	-PCM Multiplex Tester .	Set	0	
07-03-10204	-RF Sweep Generator .	Set	0	
07-03-10205	-VSWR Test Set.	Set	0	
07-03-10206	-Scalar Network Analyzer .	Set	0	
07-03-10207	-RF Spectrum Analyzer.	Set	0	
07-03-10208	-SDH Analyzer for STM-1.	Set	0	
07-03-10209	-TX / RX MW Link Analyzer .	Set	0	
07-03-10210	-PDH Analyzer ( 2Mb/s ).	Set	0	
07-03-10211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-03-10212	-Vedio Test Set.	Set	0	

07-03-10213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.	Set	0	
07-03-10214	-Cables & Adapters.	Set	0	
07-03-10215	-Waveguide / Coax. Adapters.	Set	0	
07-03-10216	-Documentation.	Set	0	
07-03-10219	Specific Tools	Lot	0	
07-03-10220	-20 Ton Lorry with crane & winch.	Unit	0	
07-03-10221	-Specific Maintenance Tools	Lot	0	
07-03-10222	-Station Tools	Lot	1	
07-03-10223	-Special Tools for waveguide.	Lot	0	
07-03-10224	-Installation Tools.	Lot	0	
07-03-10229	Services	Lot	1	
07-03-10230	-Factory Training Abroad.	Trainee	0	
07-03-10231	-Training In Iraq.	Trainee	0	
07-03-10232	-Supervision Services (Supplier Expert).	Expert	1	

07-03-12100	SDH Microwave Radio Equipment	1	lot
07-03-12101-3	-STM-1 6GHz (2+1) Radio Repeater Station with Frequency & one director Space Diversity & ATPC & Branching circuit all complete.	2	set
07-03-12102	-128QAM Modems Modules	6	set
07-03-12104	-Engineering order wire channel	1	set
07-03-12105	-2Mb/s wayside	1	set
07-03-12106	-Management Interface	1	set
07-03-12107	-Peripherals	1	set
07-03-12108	Rack with 48V.d/c unit	6	set
07-03-12109	-Installation& materials &Maintenance tools	2	set
07-03-12119	Microwave Antennas	1	lot
07-03-12120	-Parabolic Dish (1.8m-3.7m).diameter	3	set
07-03-12121	-Antenna Radiation Element with (1/2)Ports.	3	set
07-03-12122	-Connector flanges	3	set
07-03-12123	-Tower attachment	3	set
07-03-12124	-Installation & Maintenance tools & materials.	1	set
07-03-12125	Radome	3	set
07-03-12129	Microwave Feeders	1	Lot
07-03-12130	-Elliptical waveguide for L6/U6/11GHz band	300	Meter
07-03-12131	-Medium capacity dehydrator.220v.AC,50KHz	1	unit
07-03-12132	-Pressure Window	6	unit
07-03-12133	-Fixture clamps.	300	unit
07-03-12134	-Earthing Kits.	12	set
07-03-12135	-Installation material &Tools	3	set
07-03-12136	-Documentation	1	set
07-03-12139	DC Power Plant	1	Lot
07-03-12140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.	1	set
07-03-12141	- 48v Lead-Acid Sealed-Batteries 200Ah/48V	1	set
07-03-12142	-Cabinet	2	set
07-03-12143	-Installation materials ,cables,tools	1	set
07-03-12144	-Documentation	1	set
07-03-12149	Air Conditioners	1	Lot
07-03-12150-1	-Split type or window type 2-2.3 T unit	2	set
07-03-12151	-Piping & installation materials & fixtures.	2	set
07-03-12153	-Documentation.	2	set
07-03-12159	Diesel Engine Generator	1	Lot
07-03-12160	Capacity 50KVA ,Dual Set	1	set
07-03-12161	Daily fuel tank	1	set
07-03-12162	Fan	1	set
07-03-12163	Piping	1	set
07-03-12164	Cntrol cubicle&Alarms	1	set
07-03-12165	Installation Materials&Tools	1	set
07-03-12166	Spare Parts	1	set
07-03-12167	-Documentation	1	set
07-03-12169	SDH Multiplex Equipment	1	lot
07-03-12178	-Installation Materials	1	Lot
07-03-12181	- 2M Primary Mutiplex with common units & Subrack etc,64kb/s data Channel units	1	ea
07-03-12187-1	- 4W 1E&M Channel units for 2M Primary Multiplex.	3	ea
07-03-12187-2	-2W FXO Channel units for 2M Primary Multiplex.	0	ea
07-03-12187-3	- 2W FXS Channel units for 2M Primary Multiplex.	6	ea
07-03-12239	Microwave Tower	1	lot
07-03-12240	-70m high self supporting tower main meterial	1	lot
07-03-12241	-Installation materials for self supporting tower	1	lot
07-03-12249	Vedio/Sound Equipment	1	lot
07-03-12258	- 4 Codecs sound channels	1	lot



**ANNEX SEVEN / TRANSPORT & COMMUNICATIONS / TELECOMMUNICATIONS**

**Sub - sector : East Digital Microwave Link**

**Site - Name : FATHA**

<b>Code</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Complementary Items</b>
07-03-13100	SDH Microwave Radio Equipment	Lot	1	
07-03-13101	-STM-1, 8/6 GHZ (3+1) Radio Terminal With Frequency & Space Diversity all complete for 2 directions.	Set	1	
07-03-13102	-128 QAM Modems Modules.	Set	4	
07-03-13103	-Protection Switch.	Set	2	
07-03-13104	-Engineering order wire channel.	Set	2	
07-03-13105	-2Mb/s auxiliary traffic.	Set	2	
07-03-13106	-Interface to central Network management.	Set	2	
07-03-13107	-Peripherals ( Lap Top PC , ETC..... )	Set	1	
07-03-13108	-Rack with 48V. d/c unit (duplicated ).	Set	3	
07-03-13109	-Installation & Maintenance tools & materials.	Set	2	
07-03-13110	-Spare parts & spare units.	Set	2	
07-03-13111	-Documentation.	Set	1	
07-03-13119	Microwave Antennas	Lot	1	
07-03-13120	-Parabolic Dish ( 3 -3.7m. diameter ).	Set	2	
07-03-13121	-Antenna Radiation Element with ( 1 / 2 )Ports.	Set	2	
07-03-13122	-Connector Flanges.	Set	2	
07-03-13123	-Tower Attachment.	Set	2	
07-03-13124	-Installation & Maintenance tools & materials.	Set	2	
07-03-13129	Microwave Feeders	Lot	1	
07-03-13130	-Elliptical waveguide for 8/6 GHZ band .	Meter	200	
07-03-13131	-Medium capacity dehydrator.	Unit	1	
07-03-13132	-Pressure Window.	Unit	4	
07-03-13133	-Fixture clamps.	Set	4	
07-03-13134	-Earthing Kits.	Set	4	
07-03-13135	-Installation materials & tools.	Set	4	
07-03-13136	-Documentation.	Set	1	
07-03-13139	DC Power Plant	Lot	1	
07-03-13140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.	Set	1	
07-03-13141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-03-13142	-Cabinet.	Set	2	
07-03-13143	-Installation materials , cables, tools.	Set	1	
07-03-13144	-Documentation.	Set	1	
07-03-13149	Air Conditioners	Lot	1	
07-03-13150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-03-13151	-Piping & installation materials & fixtures.	Set	2	
07-03-13152	-Spare parts.	Set	2	
07-03-13153	-Documentation.	Set	2	
07-03-13159	Diesel Engine Generator	Lot	1	
07-03-13160	-Capacity 50 KVA, Dual Set.	Set	1	
07-03-13161	-Daily Fuel Tank.	Set	1	

07-03-13162	-Fan.	Set	1	
07-03-13163	-Piping.	Set	1	
07-03-13164	-Control cubicle & Alarms.	Set	1	
07-03-13165	-Installation Materials & Tools.	Set	1	
07-03-13166	-Spare parts & PCB's.	Set	1	
07-03-13167	-Documentation.	Set	1	
07-03-13169	SDH Multiplex Equipment	Lot	1	
07-03-13170	-STM-4 Multiplexer Subrack with redundant common units	Set	0	
07-03-13171	-STM-1 Multiplex Subrack with redundant common units	Set	0	
07-03-13172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	0	
07-03-13173	-Access & Connection Modules.	Set	0	
07-03-13174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	0	
07-03-13175	-Full Matrix ( duplicated).	Unit	0	
07-03-13176	-Auxiliary /Engineering order wire.	Set	0	
07-03-13177	-Telephone Handset.	Lot	0	
07-03-13178	-Installation Materials & Tools.	Lot	0	
07-03-13179	-Racks with power supply unit (duplicated)and cable head.	Set	1	
07-03-13180	-Digital Distribution Frames.	Set	1	
07-03-13181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	0	
07-03-13182	-Equipment craft terminal for programmed control and display with operation soft ware .	Set	0	
07-03-13183	-Spare parts & spare units.	Lot	1	
07-03-13184	-Installation materials & tools.	Lot	1	
07-03-13185	-Documentation.	Set	1	
07-03-13189	Network Management Equipment	Lot	0	
07-03-13190	-Central Network Management System platform(Hardware)	Lot	0	
07-03-13191		Set	0	
07-03-13192	-Central Network Management System software packages.	Lot	0	
07-03-13193	-Local Network Management Equipment ( craft terminals).	Lot	0	
07-03-13194	-Mediation , Interface, and connection cards &modules.	Lot	0	
07-03-13195	-Installation Materials & Tools.	Set	0	
	-Documentation..			
07-03-13119	Test Instruments	Lot	0	
07-03-13200	-Digital Multimeter.	Set	0	
07-03-13201	-Frequency Counter .	Set	0	
07-03-13202	-Power Meter .	Set	0	
07-03-13203	-PCM Multiplex Tester .	Set	0	
07-03-13204	-RF Sweep Generator .	Set	0	
07-03-13205	-VSWR Test Set.	Set	0	
07-03-13206	-Scalar Network Analyzer .	Set	0	
07-03-13207	-RF Spectrum Analyzer.	Set	0	
07-03-13208	-SDH Analyzer for STM-1.	Set	0	
07-03-13209	-TX / RX MW Link Analyzer .	Set	0	
07-03-13210	-PDH Analyzer ( 2Mb/s ).	Set	0	
07-03-13211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-03-13212	-Vedio Test Set.	Set	0	

07-03-13213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.	Set	0	
07-03-13214	-Cables & Adapters.	Set	0	
07-03-13215	-Waveguide / Coax. Adapters.	Set	0	
07-03-13216	-Documentation.	Set	0	
07-03-13219	Specific Tools	Lot	0	
07-03-13220	-20 Ton Lorry with crane & winch.	Unit	0	
07-03-13221	-Specific Maintenance Tools	Lot	0	
07-03-13222	-Station Tools	Lot	1	
07-03-13223	-Special Tools for waveguide.	Lot	0	
07-03-13224	-Installation Tools.	Lot	0	
07-03-13229	Services	Lot	1	
07-03-13230	-Factory Training Abroad.	Trainee	0	
07-03-13231	-Training In Iraq.	Trainee	0	
07-03-13232	-Supervision Services (Supplier Expert).	Expert	1	

07-03-14100 b)842520	SDH Microwave Radio Equipment	1	lot
07-03-14101-3 b)842520	-STM-1 6GHz (2+1) Radio Repeater Station with Frequency & one director Space Diversity & ATPC & Branching circuit all complete.	2	set
07-03-14102 b)842520	-128QAM Modems Modules	6	set
07-03-14104 b)842520	-Engineering order wire channel	1	set
07-03-14105 b)842520	-2Mb/s wayside	1	set
07-03-14106 b)842520	Management Interface	1	set
07-03-14107 b)842520	-Peripherals	1	set
07-03-14108 b)842520	Rack with 48V.d/c unit	6	set
07-03-14109 b)842520	-Installation& materials &Maintenance tools	2	set
07-03-14119 b)852520	Microwave Antennas	1	lot
07-03-14120 b)852520	-Parabolic Dish (1.8m-3.7m).diameter	3	set
07-03-14121 b)852520	-Antenna Radiation Element with (1/2)Ports.	3	set
07-03-14122 b)852520	-Connector flanges	3	set
07-03-14123 b)852520	-Tower attachment	3	set
07-03-14124 b)852520	-Installation & Maintenance tools & materials.	1	set
07-03-14125 b)852520	Radome	3	set
07-03-14129 b)852520	Microwave Feeders	1	Lot
07-03-14130 b)852520	-Elliptical waveguide for L6/U6/11GHz band	300	Meter
07-03-14131 b)852520	-Medium capacity dehydrator.220v.AC,50KHz	1	unit
07-03-14132 b)852520	-Pressure Window	6	unit
07-03-14133 b)852520	-Fixture clamps.	300	unit
07-03-14134 b)852520	-Earthing Kits.	12	set
07-03-14135 b)852520	-Installation material&Tools	3	set
07-03-14136 b)852520	-Documentation	1	set
07-03-14139 b)850440	DC Power Plant	1	Lot
07-03-14140 b)850440	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.	1	set
07-03-14141 b)850710	- 48v Lead-Acid Sealed-Batteries 200Ah/48V	1	set
07-03-14142 b)850440	-Cabinet	2	set
07-03-14143 b)850440	-Installation materials ,cables,tools	1	set
07-03-14144 b)850440	-Documentation	1	set
07-03-14149 b)841581	Air Conditioners	1	Lot
07-03-14150 b)841581	-Air conditioning packaged type 4-5 T unit	2	set
07-03-14150-1 b)841581	-Split type or window type 2-2.3 T unit	2	set
07-03-14151 b)841581	-Piping & installation materials & fixtures.	4	set
07-03-14153 b)841581	-Documentation.	4	set
07-03-14159 b)850212	Diesel Engine Generator	1	Lot
07-03-14160 b)850212	Capacity 50KVA ,Dual Set	1	set
07-03-14161 b)850212	Daily fuel tank	1	set
07-03-14162 b)850212	Fan	1	set

07-03-14163	b)850212	Piping	1	set
07-03-14164	b)850212	Cntrol cubicle&Alarms	1	set
07-03-14165	b)850212	Installation Materials&Tools	1	set
07-03-14166	b)850212	Spare Parts	1	set
07-03-14167	b)850212	-Documentation	1	set
07-03-14169	b)851750	SDH Multiplex Equipment	1	lot
07-03-14178	b)851750	-Installation Materials	1	Lot
07-03-14181	b)851750	- 2M Primary Mutiplex with common units & Subrack etc,64kb/s data Channel units	1	ea
07-03-14187-1	b)851750	- 4W 1E&M Channel units for 2M Primary Multiplex.	3	ea
07-03-14187-3	b)851750	- 2W FXS Channel units for 2M Primary Multiplex.	6	ea
07-03-14239	b)730820	Microwave Tower	1	lot
07-03-14240	b)730820	-70m high self supporting tower main meterial	1	lot
07-03-14241		-Installation materials for self supporting tower	1	lot

a)07-03-15100 b)842520	SDH Microwave Radio Equipment	1	lot
a)07-03-15101-5 b)842520	-STM-1 6GHz (2+1) Radio Repeater Station with Frequency & Space Diversity & ATPC & Branching circuit all complete.	2	set
a)07-03-15102 b)842520	-128QAM Modems Modules	6	set
a)07-03-15104 b)842520	-Engineering order wire channel	1	set
a)07-03-15105 b)842520	-2Mb/s wayside	1	set
a)07-03-15106 b)842520	Management Interface	1	set
a)07-03-15107 b)842520	-Peripherals	1	set
a)07-03-15108 b)842520	Rack with 48V.d/c unit	6	set
a)07-03-15109 b)842520	-Installation& materials &Maintenance tools	2	set
a)07-03-15119 b)852520	Microwave Antennas	1	lot
a)07-03-15120 b)852520	-Parabolic Dish (1.8m-3.7m).diameter	4	set
a)07-03-15121 b)852520	-Antenna Radiation Element with (1/2)Ports.	4	set
a)07-03-15122 b)852520	-Connector flanges	4	set
a)07-03-15123 b)852520	-Tower attachment	4	set
a)07-03-15124 b)852520	-Installation & Maintenance tools & materials.	1	set
a)07-03-15125 b)852520	Radome	4	set
a)07-03-15129 b)852520	Microwave Feeders	1	Lot
a)07-03-15130 b)852520	-Elliptical waveguide for L6/U6/11GHz band	300	Meter
a)07-03-15131 b)852520	-Medium capacity dehydrator.220v.AC,50KHz	1	unit
a)07-03-15132 b)852520	-Pressure Window	8	unit
a)07-03-15133 b)852520	-Fixture clamps.	300	unit

a)07-03-15134 b)852520	-Earthing Kits.	16	set
a)07-03-15135 b)852520	-Installation material&Tools	4	set
a)07-03-15136 b)852520	-Documentation	1	set
a)07-03-15139 b)850440	DC Power Plant	1	Lot
a)07-03-15140 b)850440	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.	1	set
a)07-03-15141 b)850710	- 48v Lead-Acid Sealed-Batteries 200Ah/48V	1	set
a)07-03-15142 b)850440	-Cabinet	2	set
a)07-03-15143 b)850440	-Installation materials ,cables,tools	1	set
a)07-03-15144 b)850440	-Documentation	1	set
a)07-03-15149 b)841581	Air Conditioners	1	Lot
a)07-03-15150-1 b)841581	-Split type or window type 2-2.3 T unit	2	set
a)07-03-15151 b)841581	-Piping & installation materials & fixtures.	2	set
a)07-03-15153 b)841581	-Documentation.	2	set
a)07-03-15159 b)850212	Diesel Engine Generator	1	Lot
a)07-03-15160 b)850212	Capacity 50KVA ,Dual Set	1	set
a)07-03-15160-1 b)850212	Capacity 50KVA ,Single Set		set
a)07-03-15161 b)850212	Daily fuel tank	1	set
a)07-03-15162 b)850212	Fan	1	set
a)07-03-15163 b)850212	Piping	1	set
a)07-03-15164 b)850212	Cntrol cubicle&Alarms	1	set
a)07-03-15165 b)850212	Installation Materials&Tools	1	set

a)07-03-15166 b)850212	Spare Parts	1	set
a)07-03-15167 b)850212	-Documentation	1	set
a)07-03-15169 b)851750	SDH Multiplex Equipment	1	lot
a)07-03-15178 b)851750	-Installation Materials	1	Lot
a)07-03-15181 b)851750	- 2M Primary Mutiplex with common units & Subrack etc,64kb/s data Channel units	1	ea
a)07-03-15187- 1 b)851750	- 4W 1E&M Channel units for 2M Primary Multiplex.	3	ea
a)07-03-15187- 3 b)851750	- 2W FXS Channel units for 2M Primary Multiplex.	6	ea

**ANNEX SEVEN / TRANSPORT & COMMUNICATIONS / TELECOMMUNICATIONS**

**Sub - sector : East Digital Microwave Link**

**Site - Name : BAQUBA EXCH.**

<b>Code</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Complementary Items</b>
07-03-16100	SDH Microwave Radio Equipment	Lot	1	
07-03-16101	-STM-1,13/11/8/6GHZ (3+1), Radio Terminal With Frequency & Space Diversity all complete.	Set	2	
07-03-16102	-128 QAM Modems Modules.	Set	4	
07-03-16103	-Protection Switch.	Set	1	
07-03-16104	-Engineering order wire channel.	Set	2	
07-03-16105	-2Mb/s auxiliary traffic.	Set	2	
07-03-16106	-Interface to central Network management.	Set	2	
07-03-16107	-Peripherals ( Lap Top PC , ETC..... )	Set	1	
07-03-16108	-Rack with 48V. d/c unit (duplicated ).	Set	3	
07-03-16109	-Installation & Maintenance tools & materials.	Set	2	
07-03-16110	-Spare parts & spare units.	Set	2	
07-03-16111	-Documentation.	Set	1	
07-03-16119	Microwave Antennas	Lot	1	
07-03-16120	-Parabolic Dish ( 1.8m. diameter ).	Set	1	
07-03-16121	-Antenna Radiation Element with ( 1 / 2 )Ports.	Set	1	
07-03-16122	-Connector Flanges.	Set	1	
07-03-16123	-Tower Attachment.	Set	1	
07-03-16124	-Installation & Maintenance tools & materials.	Set	1	
<b>07-03-16125</b>	<b>Radome</b>	<b>Set</b>	<b>1</b>	
07-03-16129	Microwave Feeders	Lot	1	
07-03-16130	-Elliptical waveguide for 13/11/8/6 GHZ band .	Meter	100	
07-03-16131	-Medium capacity dehydrator.	Unit	1	
07-03-16132	-Pressure Window.	Unit	2	
07-03-16133	-Fixture clamps.	Set	<b>50</b>	
07-03-16134	-Earthing Kits.	Set	2	
07-03-16135	-Installation materials & tools.	Set	2	
07-03-16136	-Documentation.	Set	1	
07-03-16138	Self Supporting Steel Tower 80Mt. Complete With all accessories, installation & painting materials.	Lot	0	
07-03-16139	DC Power Plant	Lot	1	
07-03-16140	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.	Set	1	
07-03-16141	-48V, 250Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-03-16142	-Cabinet.	Set	2	
07-03-16143	-Installation materials , cables, tools.	Set	1	
07-03-16144	-Documentation.	Set	1	
07-03-16149	Air Conditioners	Lot	1	
07-03-16150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-03-16151	-Piping & installation materials & fixtures.	Set	2	
07-03-16152	-Spare parts.	Set	2	

07-03-16153	-Documentation.	Set	2	
07-03-16159	Diesel Engine Generator	Lot	1	
07-03-16160	-Capacity 50 KVA, Dual Set.	Set	1	
07-03-16161	-Daily Fuel Tank.	Set	1	
07-03-16162	-Fan.	Set	1	
07-03-16163	-Piping.	Set	1	
07-03-16164	-Control cubicle & Alarms.	Set	1	
07-03-16165	-Installation Materials & Tools.	Set	1	
07-03-16166	-Spare parts & PCB's.	Set	1	
07-03-16167	-Documentation.	Set	1	
07-03-16169	SDH Multiplex Equipment	Lot	1	
07-03-16170	-STM-4 Multiplexer Subrack with redundant common units	Set	2	
07-03-16171	-STM-1 Multiplex Subrack with redundant common units	Set	1	
07-03-16172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	3	
07-03-16173	-Access & Connection Modules.	Set	2	
07-03-16174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	0	
07-03-16175	-Full Matrix ( duplicated).	Unit	4	
07-03-16176	-Auxiliary /Engineering order wire.	Set	1	
07-03-16177	-Telephone Handset.	Lot	1	
07-03-16178	-Installation Materials & Tools.	Lot	2	
07-03-16179	-Racks with power supply unit (duplicated)and cable head.	Set	3	
07-03-16180	-Digital Distribution Frames.	Set	3	
07-03-16181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	10	
07-03-16182	-Equipment craft terminal for programmed control and display with operation software .	Set	1	
07-03-16183	-Spare parts & spare units.	Lot	2	
07-03-16184	-Installation materials & tools.	Lot	2	
07-03-16185	-Documentation.	Set	1	
<b>07-03-16186</b>	<b>'- Tributary Units (1x34Mb/s, 34M SW).</b>	<b>Set</b>	<b>3</b>	
<b>07-03-16187-1</b>	<b>'- 4W 1E&amp;M Channel units for 2M Primary Multiplex.</b>	<b>Ea</b>	<b>3</b>	
<b>07-03-16187-2</b>	<b>'-2W FXO Channel units for 2M Primary Multiplex.</b>	<b>Ea</b>	<b>0</b>	
<b>07-03-16187-3</b>	<b>'- 2W FXS Channel units for 2M Primary Multiplex.</b>	<b>Ea</b>	<b>6</b>	
07-03-16189	Network Management Equipment	Lot	1	
07-03-16190	-Central Network Management System platform(Hardware)	Lot	0	
07-03-16191		Set	0	
07-03-16192	-Central Network Management System software packages.	Lot	1	
07-03-16193	-Local Network Management Equipment ( craft terminals).	Lot	1	
07-03-16194	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-03-16195	-Installation Materials & Tools.	Set	1	
	-Documentation..			
07-03-16119	Test Instruments	Lot	1	
07-03-16200	-Digital Multimeter.	Set	2	
07-03-16201	-Frequency Counter .	Set	1	

07-03-16202	-Power Meter .	Set	1	
07-03-16203	-PCM Multiplex Tester .	Set	1	
07-03-16204	-RF Sweep Generator .	Set	0	
07-03-16205	-VSWR Test Set.	Set	0	
07-03-16206	-Scalar Network Analyzer .	Set	0	
07-03-16207	-RF Spectrum Analyzer.	Set	0	
07-03-16208	-SDH Analyzer for STM-1.	Set	1	
07-03-16209	-TX / RX MW Link Analyzer .	Set	0	
07-03-16210	-PDH Analyzer ( 2Mb/s ).	Set	1	
07-03-16211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-03-16212	-Vedio Test Set.	Set	0	
07-03-16213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.	Set	1	
07-03-16214	-Cables & Adapters.	Set	1	
07-03-16215	-Waveguide / Coax. Adapters.	Set	1	
07-03-16216	-Documentation.	Set	1	
07-03-16219	Specific Tools	Lot	1	
07-03-16220	-20 Ton Lorry with crane & winch.	Unit	0	
07-03-16221	-Specific Maintenance Tools	Lot	1	
07-03-16222	-Station Tools	Lot	1	
07-03-16223	-Special Tools for waveguide.	Lot	1	
07-03-16224	-Installation Tools.	Lot	1	
07-03-16229	Services	Lot	1	
07-03-16230	-Factory Training Abroad.	Trainee	2	
07-03-16231	-Training In Iraq.	Trainee	6	
07-03-16232	-Supervision Services (Supplier Expert).	Expert	2	

a)07-03-17100 b)842520	SDH Microwave Radio Equipment	1	lot
a)07-03-17101-6 b)842520	-STM-1 6GHz (2+1) Radio Terminal Station with Frequency Diversity & ATPC & Branching circuit and without Space Diversity all complete.	1	set
a)07-03-17101-7 b)842520	-STM-1 11GHz (2+1) Radio Terminal Station with Frequency Diversity & ATPC & Branching circuit ,without Space Diversity all complete	1	set
a)07-03-17102 b)842520	-128QAM Modems Modules	3	set
a)07-03-17102-1 b)842520	-64QAM Modems Modules	3	set
a)07-03-17103 b)842520	-Hitless Protection Switch	2	set
a)07-03-17104 b)842520	-Engineering order wire channel	2	set
a)07-03-17105 b)842520	-2Mb/s wayside	2	set
a)07-03-17106 b)842520	Management Interface	2	set
a)07-03-17107 b)842520	-Peripherals	1	set
a)07-03-17108 b)842520	Rack with 48V.d/c unit	6	set
a)07-03-17109 b)842520	-Installation& materials &Maintenance tools	2	set
a)07-03-17119 b)852520	Microwave Antennas	1	lot
a)07-03-17120 b)852520	-Parabolic Dish (1.8m-3.7m).diameter	2	set
a)07-03-17121 b)852520	-Antenna Radiation Element with (1/2)Ports.	2	set
a)07-03-17122 b)852520	-Connector flanges	2	set
a)07-03-17123 b)852520	-Tower attachment	2	set
a)07-03-17124 b)852520	-Installation & Maintenance tools & materials.	1	set
a)07-03-17125 b)852520	Radome	2	set
a)07-03-17129 b)852520	Microwave Feeders	1	Lot

a)07-03-17130 b)852520	-Elliptical waveguide for L6/U6/11GHz band	600	Meter
a)07-03-17131 b)852520	-Medium capacity dehydrator.220v.AC,50KHz	1	unit
a)07-03-17132 b)852520	-Pressure Window	3	unit
a)07-03-17133 b)852520	-Fixture clamps.	600	unit
a)07-03-17134 b)852520	-Earthing Kits.	6	set
a)07-03-17135 b)852520	-Installation material &Tools	2	set
a)07-03-17136 b)852520	-Documentation	1	set
a)07-03-17139 b)850440	DC Power Plant	1	Lot
a)07-03-17140 b)850440	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.	1	set
a)07-03-17141 b)850710	- 48v Lead-Acid Sealed-Batteries 200Ah/48V	1	set
a)07-03-17142 b)850440	-Cabinet	2	set
a)07-03-17143 b)850440	-Installation materials ,cables,tools	1	set
a)07-03-17144 b)850440	-Documentation	1	set
a)07-03-17149 b)841581	Air Conditioners	1	Lot
a)07-03-17150 b)841581	-Air conditioning packaged type 4-5 T unit	2	set
a)07-03-17150-1 b)841581	-Split type or window type 2-2.3 T unit	2	set
a)07-03-17151 b)841581	-Piping & installation materials & fixtures.	4	set
a)07-03-17153 b)841581	-Documentation.	4	set
a)07-03-17159 b)850212	Diesel Engine Generator	1	Lot
a)07-03-17160 b)850212	Capacity 50KVA ,Dual Set	1	set
a)07-03-17161 b)850212	Daily fuel tank	1	set

a)07-03-17162 b)850212	Fan	1	set
a)07-03-17163 b)850212	Piping	1	set
a)07-03-17164 b)850212	Cntrol cubicle&Alarms	1	set
a)07-03-17165 b)850212	Installation Materials&Tools	1	set
a)07-03-17166 b)850212	Spare Parts	1	set
a)07-03-17167 b)850212	-Documentation	1	set
a)07-03-17169 b)851750	SDH Multiplex Equipment	1	lot
a)07-03-17171 b)851750	-STM-1 Multiplex Subrack with redundant common units	3	Set
a)07-03-17172 b)851750	-Tributary Units ( 21x2Mb/s,2M PKG).	1	Set
a)07-03-17176 b)851750	-Engineering order wire	1	ea
a)07-03-17178 b)851750	-Installation Materials	1	Lot
a)07-03-17179 b)851750	-SDH V-RACK with necessary cable head etc.	1	Set
a)07-03-17186 b)851750	- Tributary Units (1x34Mb/s, 34M SW).	3	Set
a)07-03-17187-1 b)851750	- 4W 1E&M Channel units for 2M Primary Multiplex.	2	ea
a)07-03-17187-3 b)851750	- 2W FXS Channel units for 2M Primary Multiplex.	3	ea
a)07-03-17249 b)851750	Vedio/Sound Equipment	1	lot
a)07-03-17252 b)851750	-1 Encoders(2x Video 34Mb/s plus 4 sound channels/each)and 2 Decoders(2x Video 34Mb/s plus 4 sound channels/each)and 4 Codecs sound channels	1	Lot

a)07-03-18100 b)842520	SDH Microwave Radio Equipment	1	lot
a)07-03-18101-1 b)842520	-STM-1 6GHz (2+1) Radio Terminal Station with Frequency & Space Diversity & ATPC & Branching circuit all complete.		set
a)07-03-18101-2 b)842520	-STM-1 11GHz (1+1) Radio Terminal Station with Frequency Diversity & ATPC & Branching circuit ,without Space Diversity all complete		set
a)07-03-18101-3 b)842520	-STM-1 6GHz (2+1) Radio Repeater Station with Frequency & one director Space Diversity & ATPC & Branching circuit all complete.		set
a)07-03-18101-4 b)842520	-STM-1 6GHz (2+1) Radio Terminal Station with Frequency & one director Space Diversity & ATPC & Branching circuit all complete.		set
a)07-03-18101-5 b)842520	-STM-1 6GHz (2+1) Radio Repeater Station with Frequency & Space Diversity & ATPC & Branching circuit all complete.		set
a)07-03-18101-6 b)842520	-STM-1 6GHz (2+1) Radio Terminal Station with Frequency Diversity & ATPC & Branching circuit and without Space Diversity all complete.		set
a)07-03-18101-7 b)842520	-STM-1 11GHz (2+1) Radio Terminal Station with Frequency Diversity & ATPC & Branching circuit ,without Space Diversity all complete	1	set
a)07-03-18102 b)842520	-128QAM Modems Modules		set
a)07-03-18102-1 b)842520	-64QAM Modems Modules	3	set
a)07-03-18103 b)842520	-Hitless Protection Switch	1	set
a)07-03-18104 b)842520	-Engineering order wire channel	1	set
a)07-03-18105 b)842520	-2Mb/s wayside	1	set
a)07-03-18106 b)842520	Management Interface	1	set
a)07-03-18107 b)842520	-Peripherals	1	set
a)07-03-18108 b)842520	Rack with 48V.d/c unit	3	set
a)07-03-18109 b)842520	-Installation& materials &Maintenance tools	1	set
a)07-03-18119 b)852520	Microwave Antennas	1	lot
a)07-03-18120 b)852520	-Parabolic Dish (1.8m-3.7m).diameter	1	set

a)07-03-18121 b)852520	-Antenna Radiation Element with (1/2)Ports.	1	set
a)07-03-18122 b)852520	-Connector flanges	1	set
a)07-03-18123 b)852520	-Tower attachment	1	set
a)07-03-18124 b)852520	-Installation & Maintenance tools & materials.	1	set
a)07-03-18125 b)852520	Radome for 11GHz Antenna	1	set
a)07-03-18129 b)852520	Microwave Feeders	1	Lot
a)07-03-18130 b)852520	-Elliptical waveguide for L6/U6/11GHz band	100	Meter
a)07-03-18131 b)852520	-Medium capacity dehydrator.220v.AC,50KHz	1	unit
a)07-03-18132 b)852520	-Pressure Window	1	unit
a)07-03-18133 b)852520	-Fixture clamps.	100	unit
a)07-03-18134 b)852520	-Earthing Kits.	2	set
a)07-03-18135 b)852520	-Installation material &Tools	1	set
a)07-03-18136 b)852520	-Documentation	1	set
a)07-03-18139 b)850440	DC Power Plant	1	Lot
a)07-03-18140 b)850440	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.		set
a)07-03-18140-1 b)850440	-Modular switched rectifier system 48V / 30Ampere module (3+1) configuration.	1	set
a)07-03-18141-1 b)850440	- 48v, Lead-Acid Sealed-Batteries 300Ah/48V	1	set
a)07-03-18142 b)850440	-Cabinet	2	set
a)07-03-18143 b)850440	-Installation materials ,cables,tools	1	set
a)07-03-18144 b)850440	-Documentation	1	set
a)07-03-18159 b)850212	Diesel Engine Generator	1	Lot

a)07-03-18160-1 b)850212	Capacity 50KVA ,Single Set	1	set
a)07-03-18161 b)850212	Daily fuel tank	1	set
a)07-03-18162 b)850212	Fan	1	set
a)07-03-18163 b)850212	Piping	1	set
a)07-03-18164 b)850212	Control cubicle&Alarms	1	set
a)07-03-18165 b)850212	Installation Materials&Tools	1	set
a)07-03-18166 b)850212	Spare Parts	1	set
a)07-03-18167 b)850212	-Documentation	1	set
a)07-03-18169 b)851750	SDH Multiplex Equipment	1	lot
a)07-03-18170 b)851750	-STM-4 Multiplex Subrack with redundant common units	1	Set
a)07-03-18171 b)851750	-STM-1 Multiplex Subrack with redundant common units	3	Set
a)07-03-18172 b)851750	-Tributary Units ( 21x2Mb/s,2M PKG).	6	Set
a)07-03-18176 b)851750	-Engineering order wire	2	ea
a)07-03-18178 b)851750	-Installation Materials	1	Lot
a)07-03-18179 b)851750	-SDH V-RACK with necessary cable head etc.	2	Set
a)07-03-18181 b)851750	- 2M Primary Multiplex with common units & Subrack etc,64kb/s data Channel units	4	ea
a)07-03-18186 b)851750	- Tributary Units (1x34Mb/s, 34M SW).	3	Set
a)07-03-18187-1 b)851750	- 4W 1E&M Channel units for 2M Primary Multiplex.	12	ea
a)07-03-18187-2 b)851750	-2W FXO Channel units for 2M Primary Multiplex.	24	ea
a)07-03-18249 b)851750	Vedio/Sound Equipment	1	lot
a)07-03-18257 b)851750	- 1 Decoders(2x Video 34Mb/s plus 4 sound channels/each)	1	lot



**ANNEX SEVEN / TRANSPORT & COMMUNICATIONS / TELECOMMUNICATIONS**

**Sub - sector : Digital Microwave Link between Baghdad & Basrah with Extension**

**to port UM QASR**

**Site - Name : SALHIYA T.**

<b>Code</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty</b>	<b>Complementary Items</b>
07-03-25100	SDH Microwave Radio Equipment	Lot	1	
07-03-25101	-STM-1,13/11GHZ (1+1)Radio Terminal With Frequency all complete.	Set	1	
07-03-25102	-128 QAM Modems Modules.	Set	2	
07-03-25103	-Protection Switch.	Set	1	
07-03-25104	-Engineering order wire channel.	Set	1	
07-03-25105	-2Mb/s auxiliary traffic.	Set	1	
07-03-25106	-Interface to central Network management.	Set	1	
07-03-25107	-Peripherals ( Lap Top PC , ETC..... )	Set	1	
07-03-25108	-Rack with 48V. d/c unit (duplicated ).	Set	1	
07-03-25109	-Installation & Maintenance tools & materials.	Set	1	
07-03-25110	-Spare parts & spare units.	Set	1	
07-03-25111	-Documentation.	Set	1	
07-03-25119	Microwave Antennas	Lot	1	
07-03-25120	-Parabolic Dish ( 1.8m.-3.7m. diameter ).	Set	1	
07-03-25121	-Antenna Radiation Element with ( 1 / 2 / 4)Ports.	Set	1	
07-03-25122	-Connector Flanges.	Set	1	
07-03-25123	-Tower Attachment.	Set	1	
07-03-25124	-Installation & Maintenance tools & materials.	Set	1	
<b>07-03-25125</b>	<b>Radome</b>	<b>Set</b>	<b>1</b>	
07-03-25129	Microwave Feeders	Lot	1	
07-03-25130	-Elliptical waveguide for 13/11 GHZ band .	Meter	115	
07-03-25131	-Medium capacity dehydrator.	Unit	1	
07-03-25132	-Pressure Window.	Unit	2	
07-03-25133	-Fixture clamps.	Set	<b>50</b>	
07-03-25134	-Earthing Kits.	Set	2	
07-03-25135	-Installation materials & tools.	Set	2	
07-03-25136	-Documentation.	Set	1	
07-03-25139	DC Power Plant	Lot	1	
07-03-25140	-Modular switched rectifier system 48V / 30Ampere module (2+1) configuration.	Set	1	
07-03-25141	-48V, 200Ah Lead-Acid Sealed-Batteries(2sets).	Lot	1	
07-03-25142	-Cabinet.	Set	2	
07-03-25143	-Installation materials , cables, tools.	Set	1	
07-03-25144	-Documentation.	Set	1	
07-03-25149	Air Conditioners	Lot	1	
07-03-25150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-03-25151	-Piping & installation materials & fixtures.	Set	2	
07-03-25152	-Spare parts.	Set	2	
07-03-25153	-Documentation.	Set	2	

07-03-25159	Diesel Engine Generator	Lot	1	
07-03-25160	-Capacity 50 KVA, Dual Set.	Set	1	
07-03-25161	-Daily Fuel Tank.	Set	1	
07-03-25162	-Fan.	Set	1	
07-03-25163	-Piping.	Set	1	
07-03-25164	-Control cubicle & Alarms.	Set	1	
07-03-25165	-Installation Materials & Tools.	Set	1	
07-03-25166	-Spare parts & PCB's.	Set	1	
07-03-25167	-Documentation.	Set	1	
07-03-25169	SDH Multiplex Equipment	Lot	1	
07-03-25170	-STM-4 Multiplexer Subrack with redundant common units	Set	0	
07-03-25171	-STM-1 Multiplex Subrack with redundant common units	Set	1	
07-03-25172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch , 7x2Mb/s).	Set	2	
07-03-25173	-Access & Connection Modules.	Set	2	
07-03-25174	-V-S Encoding-Decoding Equipment 34Mb/s IP/OP contained in subracks with common units & with function units, controllers ,connectors, ETC.....	Lot	6	
07-03-25175	-Full Matrix ( duplicated).	Unit	0	
07-03-25176	-Auxiliary /Engineering order wire.	Set	1	
07-03-25177	-Telephone Handset.	Lot	1	
07-03-25178	-Installation Materials & Tools.	Lot	1	
07-03-25179	-Racks with power supply unit (duplicated)and cable head.	Set	3	
07-03-25180	-Digital Distribution Frames.	Set	3	
07-03-25181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-03-25182	-Equipment craft terminal for programmed control and display with operation soft ware .	Set	1	
07-03-25183	-Spare parts & spare units.	Lot	1	
07-03-25184	-Installation materials & tools.	Lot	1	
07-03-25185	-Documentation.	Set	1	
<b>07-03-25186</b>	<b>'- Tributary Units (1x34Mb/s, 34M SW).</b>	<b>Set</b>	<b>3</b>	
<b>07-03-25187-1</b>	<b>'- 4W 1E&amp;M Channel units for 2M Primary Multiplex.</b>	<b>Ea</b>	<b>2</b>	
<b>07-03-25187-3</b>	<b>'- 2W FXS Channel units for 2M Primary Multiplex.</b>	<b>Ea</b>	<b>3</b>	
07-03-25189	Network Management Equipment	Lot	1	
07-03-25190	-Central Network Management System platform(Hardware)	Lot	0	
07-03-25191		Set	0	
07-03-25192	-Central Network Management System software packages.	Lot	1	
07-03-25193	-Local Network Management Equipment ( craft terminals).	Lot	1	
07-03-25194	-Mediation , Interface, and connection cards &modules.	Lot	1	
07-03-25195	-Installation Materials & Tools.	Set	1	
	-Documentation..			
07-03-25119	Test Instruments	Lot	1	
07-03-25200	-Digital Multimeter.	Set	1	
07-03-25201	-Frequency Counter .	Set	0	
07-03-25202	-Power Meter .	Set	0	
07-03-25203	-PCM Multiplex Tester .	Set	1	
07-03-25204	-RF Sweep Generator .	Set	0	

07-03-25205	-VSWR Test Set.	Set	0	
07-03-25206	-Scalar Network Analyzer .	Set	0	
07-03-25207	-RF Spectrum Analyzer.	Set	0	
07-03-25208	-SDH Analyzer for STM-1.	Set	0	
07-03-25209	-TX / RX MW Link Analyzer .	Set	0	
07-03-25210	-PDH Analyzer ( 2Mb/s ).	Set	0	
07-03-25211	-Oscilloscope 500 MHZ Dual channel.	Set	0	
07-03-25212	-Vedio Test Set.	Set	0	
07-03-25213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.	Set	0	
07-03-25214	-Cables & Adapters.	Set	0	
07-03-25215	-Waveguide / Coax. Adapters.	Set	0	
07-03-25216	-Documentation.	Set	1	
07-03-25219	Specific Tools	Lot	1	
07-03-25220	-20 Ton Lorry with crane & winch.	Unit	0	
07-03-25221	-Specific Maintenance Tools	Lot	1	
07-03-25222	-Station Tools	Lot	1	
07-03-25223	-Special Tools for waveguide.	Lot	1	
07-03-25224	-Installation Tools.	Lot	1	
07-03-25229	Services	Lot	1	
07-03-25230	-Factory Training Abroad.	Trainee	1	
07-03-25231	-Training In Iraq.	Trainee	3	
07-03-25232	-Supervision Services (Supplier Expert).	Expert	1	
<b>07-03-25249</b>	<b>Vedio/Sound Equipment</b>	<b>Lot</b>	<b>1</b>	
<b>07-03-25250</b>	<b>'-4 Encoders(2x Video 34Mb/s plus 4 sound channels/each)and 2 Decoders(2x Video 34Mb/s plus 4 sound channels/each)and 8 Codecs sound channels</b>	<b>Lot</b>	<b>1</b>	

**ANNEX SEVEN / TRANSPORT & COMMUNICATIONS / TELECOMMUNICATIONS**

**Sub - sector : East Digital Microwave Link**

**Site - Name : KIRKUK MAINTENANCE CENTER**

<b>Code</b>	<b>Item Description</b>	<b>Unit</b>	<b>Qty.</b>	<b>Complementary Items</b>
07-03-28100	SDH Microwave Radio Equipment	Lot	1	
07-03-28101	-STM-1, 6/8 GHZ (3+1) Radio Terminal with Frequency & Space Diversity Receiver modules.	Set	2	
07-03-28102	-128 QAM Modems Modules.	Set	8	
07-03-28103	-Protection Switch.	Set	1	
07-03-28104	-Engineering order wire channel.	Set	1	
07-03-28105	-2Mb/s auxiliary traffic.	Set	1	
07-03-28106	-Interface to central network management.	Set	1	
07-03-28107	-Peripherals ( Lap Top PC ,ETC.....).	Set	1	
07-03-28108	-Rack with 48V. d/c unit & Duplexers.	Set	<b>5</b>	
07-03-28109	-Installation & Maintenance tools & materials.	Set	1	
07-03-28110	-Spare parts & spare units.	Set	1	
07-03-28111	-Documentation.	Set	1	
07-03-28119	Microwave Antennas	Lot	<b>1</b>	
07-03-28120	-Parabolic Dish ( 1.8m. , 2.4m. diameter ).	Set	<b>3</b>	
07-03-28121	-Antenna Radiation Element with (one/two)Ports.	Set	<b>3</b>	
07-03-28122	-Connector Flanges.	Set	<b>3</b>	
07-03-28123	-Tower Attachment.	Set	<b>3</b>	
07-03-28124	-Installation & Maintenance tools & materials.	Set	<b>1</b>	
<b>07-03-28125</b>	<b>Radome</b>	<b>Set</b>	<b>3</b>	
07-03-28129	Microwave Feeders	Lot	1	
07-03-28130	-Elliptical waveguide for 11/13 GHZ band .	Meter	<b>500</b>	
07-03-28131	-Medium capacity dehydrator.	Unit	1	
07-03-28132	-Pressure Window.	Unit	1	
07-03-28133	-Fixture clamps.	Set	1	
07-03-28134	-Earthing Kits.	Set	1	
07-03-28135	-Installation materials & tools.	Set	1	
07-03-28136	-Documentation.	Set	1	
07-03-28139	DC Power Plant	Lot	1	
07-03-28140	-Modular switched rectifier system 48V / 30A per module (2+1) configuration.	Set	1	
07-03-28141	-48V,200Ah Lead-Acid Sealed-Batteries(2sets).	Set	1	
07-03-28142	-Cabinet.	Set	1	
07-03-28143	-Installation materials , cables, & tools.	Set	1	
07-03-28144	-Documentation.	Set	1	
07-03-28149	Air Conditioners	Lot	1	
07-03-28150	-Duplicated 18000 / 24000 BTU Unit.	Set	2	
07-03-28151	-Piping & installation materials & fixtures.	Set	2	
07-03-28152	-Spare parts.	Set	2	
07-03-28153	-Documentation.	Set	2	
07-03-28159	Diesel Engine Generator	Lot	0	

07-03-28160	-Capacity 50 KVA, Dual Set.	Set	0	
07-03-28161	-Daily Fuel Tank.	Set	0	
07-03-28162	-Fan.	Set	0	
07-03-28163	-Piping.	Set	0	
07-03-28164	-Control cubicle & Alarms.	Set	0	
07-03-28165	-Installation Materials & Tools.	Set	0	
07-03-28166	-Spare parts & PCB's.	Set	0	
07-03-28167	-Documentation.	Set	0	
07-03-28169	SDH Multiplex Equipment	Lot	1	
07-03-28170	-STM- 4 Mutliplexer Subrack with redundant common units.	Set	2	
07-03-28171	-STM-1 Multiplex Subrack with redundant common units.	Set	2	
07-03-28172	-Tributary Cards ( 3x34Mb/s, 21x2Mb/s,140/155 Mb/s switch, 7x2Mb/s .....etc.	Set	2	
07-03-28173	-Access & Connection Modules.	Set	2	
07-03-28174	-S4.1 Aggregate port FC / PC ( duplicated).	Set	0	
07-03-28175	-Full Matrix ( duplicated).	Set	2	
07-03-28176	-Auxiliary /Engineering order wire.	Set	2	
07-03-28177	-Telephone Handset.	Unit	2	
07-03-28178	-Installation Materials & Tools.	Set	2	
07-03-28179	-Racks with power supply unit (duplicated ) and cable head.	Set	4	
07-03-28180	-Digital Distribution Frames.	Set	1	
07-03-28181	-Primary Multiplex ( PCM-30CH.) Subrack with common units & channel PCB's of different configurations.	Set	1	
07-03-28182	-Equipment craft terminal for programmed control and display for operation and maintenance.	Unit	3	
07-03-28183	-Spare parts & spare units.	Set	2	
07-03-28184	-Installation materials & tools.	Set	1	
07-03-28185	-Documentation.	Set	1	
<b>07-03-28186</b>	<b>'- Tributary Units (1x34Mb/s, 34M SW).</b>	<b>Set</b>	<b>3</b>	
<b>07-03-28187-1</b>	<b>'- 4W 1E&amp;M Channel units for 2M Primary Multiplex.</b>	<b>Ea</b>	<b>2</b>	
<b>07-03-28187-3</b>	<b>'- 2W FXS Channel units for 2M Primary Multiplex.</b>	<b>Ea</b>	<b>2</b>	
07-03-28189	Network Management Equipment	Lot	0	
07-03-28190	-Central Network Management System platform ( Hard ware).	Lot	1	
07-03-28191	-Central Network Management System software packages.	Lot	1	
07-03-28192	-Local Network Management Equipment ( craft terminals).	Set	1	
07-03-28193	-Mediation , Interface, and connection cards & modules.	Lot	1	
07-03-28194	-Installation Materials & Tools.	Set	12	
07-03-28195	-Documentation..	Set		
07-03-28199	Test Instruments	Lot	1	
07-03-28200	-Digital Multimeter.	Set	10	
07-03-28201	-Frequency Counter .	Set	2	

07-03-28202	-Power Meter .	Set	2	
07-03-28203	-PCM Multiplex Tester .	Set	2	
07-03-28204	-RF Sweep Generator .	Set	1	
07-03-28205	-VSWR Test Set.	Set	2	
07-03-28206	-Scalar Network Analyzer .	Set	1	
07-03-28207	-RF Spectrum Analyzer.	Set	1	
07-03-28208	-SDH Analyzer for STM-1.	Set	1	
07-03-28209	-TX / RX MW Link Analyzer .	Set	1	
07-03-28210	-PDH Analyzer ( 2 - 140 Mb/s ).	Set	1	
07-03-28211	-Oscilloscope 500 MHZ Dual channel.	Set	1	
07-03-28212	-Vedio Test Set.	Set	1	
07-03-28213	-RF Attenuators Fixed & Variable ( 0 - 60 )DB.	Set	1	
07-03-28214	-Cables & Adapters.	Set	2	
07-03-28215	-Waveguide / Coax. Adapters.	Set	1	
07-03-28216	-Documentation.	Set		
07-03-28219	Specific Tools	Lot	1	
07-03-28220	-20 Ton Lorry with crane & winch.	Unit	2	
07-03-28221	-Specific Maintenance Tools Bag.	Unit	4	
07-03-28222	-Station Tools Bag.	Unit	4	
07-03-28223	-Special Tools for waveguide.	Unit	4	
07-03-28224	-Installation Tools.	Unit	1	
<b>07-03-28225-1</b>		<b>Set</b>	<b>1</b>	
<b>07-03-28225-2</b>	<b>'-Coaxial cable connection tool</b>	<b>Set</b>	<b>1</b>	
<b>07-03-28225-3</b>	<b>'-Portable winch kk-3h</b>	<b>Set</b>	<b>1</b>	
<b>07-03-28225-4</b>	<b>'-Hoisting stocking</b>	<b>Set</b>	<b>1</b>	
<b>07-03-28225-5</b>	<b>'-Twisting tool&amp;Flanging tool &amp;hand tool kit</b>	<b>Set</b>	<b>1</b>	
07-03-28229	Services	Lot	1	
07-03-28230	-Factory Training Abroad.	Trainee	9	
07-03-28231	-Training In Iraq.	Trainee	320	
07-03-28232	-Supervision Services (Supplier Expert).	Expert	64	
<b>07-03-28233</b>	<b>'-Factory Test Abroad</b>	<b>Week</b>	<b>8</b>	
<b>07-03-28239</b>	<b>'Microwave Tower</b>	<b>Lot</b>	<b>1</b>	
<b>07-03-28242</b>	<b>'- 100m high guided tower for supporting four 2.4m diameter anntenas complete</b>	<b>Lot</b>	<b>2</b>	
<b>07-03-28243</b>	<b>'-Installation materials for guided tower</b>	<b>Lot</b>	<b>2</b>	
<b>07-03-28245</b>	<b>'-Documentation</b>	<b>Lot</b>	<b>2</b>	
<b>07-03-28249</b>	<b>Vedio/Sound Equipment</b>	<b>Lot</b>	<b>1</b>	
<b>07-03-28251</b>	<b>' -2 Encoders(2x Video 34Mb/s plus 4 sound channels/each)and 2 Decoders(2x Video 34Mb/s plus 4 sound channels/each)and 2 Codecs sound channels</b>	<b>Lot</b>	<b>1</b>	
<b>07-03-28254</b>	<b>'- 1 Encoders(2x Video 34Mb/s plus 4 sound channels/each)and 1 Decoders(2x Video 34Mb/s plus 4 sound channels/each)and 1 Codecs sound channels</b>	<b>Lot</b>	<b>1</b>	
<b>07-03-28259</b>	<b>'-Documentation (Equipment Description(2sets),Operation &amp;Maintenance Description(1sets)</b>	<b>lot</b>	<b>2</b>	

